# ERE

## The Commission Decision\_of the Customs Union\_on December 9, 2011 N 878 CU TECHNICAL REGULATIONS TR CU 019/2011 Safety Personal Protection Equipment

The present Technical Regulations approved by <u>decision of the Commission of the Customs Union on December 9, 2011 N 878</u>. In the <u>decision of the Commission of the Customs Union on December 9, 2011 N 878</u> amended: <u>decision of the Board of ECE November 13, 2012 N 221</u>.

- Note the manufacturer's database.

<u>Lists of standardization documents,</u> <u>ensuring compliance with the requirements</u> <u>of this Technical Regulation</u>

## Foreword

1. This technical regulation of the Customs Union "On the security of personal protective equipment" (hereinafter - the technical regulations of the Customs Union) has been developed in accordance with the <u>Agreement on common principles and rules of technical regulation in the Republic of</u> <u>Belarus, Kazakhstan and the Russian Federation of November 18, 2010</u>.

2. This technical regulation of the Customs Union is designed to establish the common customs territory of the Customs Union of uniform mandatory for the application and enforcement of the requirements for personal protective equipment, ensure the free movement of personal protective equipment, put into circulation in a single customs territory of the Customs Union.

3. If personal protective equipment will be accepted other technical regulations of the Customs Union, establish requirements for personal protective equipment, the personal protective equipment must comply with the requirements of the technical regulations of the Customs Union, the action of which they are subject.

# 1. Scope

1.1. This technical regulation of the Customs Union adopted in order to ensure that the territory of the Customs Union of the protection of life and health, environmental protection and prevention of actions misleading consumers.

1.2. This technical regulation of the Customs Union applies to personal protective equipment, regardless of country of origin, have not previously been in operation (new) and put into circulation in the common customs territory of the Customs Union.

Requirements for the design, manufacture, operation, storage, transportation, marketing and utilization of personal protective equipment is not regulated in the Technical Regulations of the Customs Union and established by the legislation of the State - a member of the Customs Union.

1.3. This technical regulation of the Customs Union under the safety PPE means:

no unacceptable effects on human health and environment due to the use of personal protective equipment, including the impact of the materials from which they are made;

human safety when exposed to harmful (dangerous) factors in the operation of personal protective equipment listed below:

- Mechanical effects and general industrial pollution;
- Harmful chemicals;
- Ionizing and non-ionizing radiation;
- Effects of increased (decreased) temperature;
- The impact of electric current, electric and electromagnetic fields;
- The impact of biological agents (microorganisms, insects);
- Reduced visibility.

1.4. Personal protective equipment covered by this technical regulation of the Customs Union, listed in <u>Annex N 1</u> to this technical regulation of the Customs Union.

1.5. PPE (accessory PPE) is classified by purpose, depending on the protective properties according to <u>Annex N 2</u> to this technical regulation of the Customs Union.

1.6. Identification of personal protective equipment provided by the following rules:

1) identification of personal protective equipment made by the applicant, the person executing functions of the foreign manufacturer, bodies of state supervision (control), bodies exercising customs control, certification bodies PPE (hereinafter - identifying the person) for the following purposes:

establishment of belonging PPE within the scope of this technical regulation of the Customs Union;

prevention of actions misleading consumers (buyers and users);

2) for identification shall be established:

types of personal protective equipment in accordance with <u>Annex N 1</u> to this technical regulation of the Customs Union;

group and subgroup protections provided by <u>application of N 2</u> to this technical regulation of the Customs Union;

name of PPE in accordance with <u>Section 4 of</u> this technical regulation of the Customs Union;

3) to identify the personal protective equipment in order to establish his membership in the scope of this technical regulation of the Customs Union identifies the person should make sure that the name is identified by means of individual protection corresponds to a specific type or combination of types, provided the application N 1 and Section 4 of this technical regulation customs union, and the appointment of the protective properties corresponds to the group and the subgroup of protection or a combination thereof, provided for in Appendix N 2 to this technical regulation of the Customs Union;

4) identification of personal protective equipment for the establishment of their belonging to the scope of this technical regulation of the Customs Union is carried out by visual comparison of the type and the name of personal protective equipment specified on the labeling on the packaging or directly on the PPE, with the name and the type provided by section 4 and 1 N application of these technical regulations of the Customs Union;

5) To identify the PPE in order to prevent acts of misleading consumers (buyers, users) that identifies the person must ensure that the results of the identification procedure provided for in subparagraphs 1-4 of this paragraph, identifiable personal protection corresponds to the information specified in labeling.

1.7. The present technical regulations of the Customs Union does not apply to the following types of personal protective equipment, safety requirements are established by appropriate legislative and other documents of the State - a member of the Customs Union and the relevant technical regulations of the Customs Union:

1) Personal protective equipment used during sports;

2) Specially designed PPE for fire departments and divisions to ensure the elimination of the consequences of natural and man-made disasters;

3) Specially designed PPE for use in aviation, space technology and underwater operations;

4) Specially designed personal protective equipment to be used for medical purposes in microbiology;

5) Personal protective equipment to be used as samples for exhibitions and trade fairs.

# **2. Definitions**

This technical regulation of the Customs Union, the following terms and their definitions:

shock - an independent part or component arrest system designed to dissipate the kinetic energy developed by a fall from a height; biological factor - micro-producers, living cells and spores contained in bacterial products and their components; pathogens and viruses that can excite infectious diseases; plants, insects, arachnids, animals, capable of inflicting damage to health by their effects on the body or ingestion and skin contact;

harmful factor - a factor which impacts on human can lead to disease or poor health;

Holdover time PPE - the time period from the beginning of the use of PPE to user exposure to harmful conditions or hazard to the beginning of a situation where the level of exposure to harmful or dangerous factor of the user exceeds the established standards in the given conditions, and in the case of mechanical impact specified conditions would violate the integrity of the components of personal protective equipment; degassing PPE - neutralization (neutralization, dilution) or disposing of hazardous chemicals with PPE;

decontamination of PPE - removal (reduction) of radioactive contamination from the PPE and their components;

disinfection of PPE - removal (reduction) of bacterial contamination with PPE and their components;

disinfection PPE - removal of arthropods with personal protective equipment and their components;

protective helmet - headdress that protects the top of the head from injury by falling objects, from moisture, electric current, spatter;

protective caps (safety helmet) - headdress that protects the top of the head from impact damage on solid fixed objects;

individual life-saving device (MIS) - a device designed to save unprepared person from a height on the outer facade of buildings (structures) without the help of a specialist;

componentry PPE - removable composite components PPE supplied by the manufacturer together with or separately from PPE ready for implementation (application) form, with marks and instructions for use;

component PPE - functionally independent part personal protective equipment (including materials) designed to build personal protection, which can be removed without breaking and re-used to build personal protective equipment;

decontamination factor PPE - the ratio of the levels of radioactive contamination PPE before and after decontamination;

protection factor of personal protective equipment - reducing multiple PPE level of human exposure to harmful or dangerous factor;

coefficient of air leaks - a figure expressed a percentage of the concentration of the test substance under the front part of the personal protective breathing organ to its concentration in the atmosphere, determined under conditions where the air enters at the front of the strip shuttering through exhalation and inhalation valves, if any and loose connections individual composite components personal respiratory protection, bypassing the filter;

penetration coefficient - a figure expressed a percentage of the concentration of the test substance under the front part of personal respiratory protection to the concentration of the test substance in the test chamber atmosphere at predetermined test conditions defined by testers;

permeability through a filter (filter material) - a measure of the permeability and expressed a percentage of the concentration of the test substance after passing through a filter (filter material) to the concentration of a test substance to a filter (filter material) in a given test conditions;

multiple degassing - the ratio of hazardous chemicals on the surface of PPE before and after degassing; treatment of PPE - stage of the life cycle of PPE including production, transportation, storage, use, disposal and sale of PPE in the common customs territory of the Customs Union;

dangerous factor - a factor which impacts on human may cause injury or death;

shuttering strip - contact surface PPE to the human body for sealing the space inside the PPE;

user - an individual who has acquired personal protection and performs its intended use;

acquirer - a natural or legal person who has acquired personal protection and organizes its placing on the market and (or) the intended use;

radiation factor - the human exposure to ionizing radiation and external (or) radioactive substances released into the body and skin;

regenerative cartridge - a complementary part personal respiratory protective insulating type contained within the chemicals released when activated oxygen and absorbing carbon dioxide and water vapor;

regenerative product - chemicals that absorbs carbon dioxide and water vapor with the evolution of oxygen during the activation of regenerative cartridge;

self-rescuer - a means of respiratory protection for the evacuation of hazardous atmosphere, characterized by the presence of chemical and biological factors that exceed the established standards;

lead equivalent means of individual protection against ionizing radiation - an indicator of the effectiveness of protective material equal to the thickness of the lead plate in millimeters, as many times debilitating dose of X-rays, as well as the material; connecting element (shotgun) - opening device for connecting components that allows the user to attach a safety system to connect themselves directly or indirectly with the support;

personal protection equipment (PPE) - worn on a person means individual use to prevent or reduce harmful effects on human and (or) hazards, as well as to protect against contamination;

means Respiratory Protective Equipment (RPE) - on a man wearing a technical device that protects the body from inhalation exposure to hazardous and harmful factors;

personal protection respiratory isolation (breathing apparatus) - a means of respiratory protection, feeding air to the user (the breathing mixture) from a source independent of the environment;

means respiratory protection filter - means respiratory protection that cleans air inhaled by the user of the environment;

PPE dermatological - funds intended for application to human skin to protect it and cleaning to reduce the impact of hazards in industrial production, which do not relate to the objects of technical regulation technical regulations of the Customs Union "On the safety of perfumery and cosmetic products" (TR TC 009/2011);

harness leash (safety belt Strap) - a component of a safety system to cover the human body in order to prevent falls from a height, which may include connecting straps, buckles and elements embodied appropriately to support the entire body and to hold the body during the fall and thereafter;

harness - PPE against falls from a height, consisting of a safety harness and subsystems to be attached to insurance;

qualification requirements for the user - the list of knowledge and skills, which must have a user in order to ensure their safety when using personal protective equipment;

test substance - chemical (including aerosol), with which define the parameters personal respiratory protection, describing the efficiency of its use;

Difficult to label - attachable to the product label, which must ensure the delivery of information to the end user with the exception of the possibility of loss when handling products in the market;

holding the leash (safety belt without strap) - component covering human body and consisting of separate parts, which, in conjunction with slings fixed member at a certain height during operation;

chemical factor - influence of chemicals, compounds, including some substances of biological nature (antibiotics, vitamins, hormones, enzymes, protein drugs), which are obtained by chemical synthesis, and (or) for control methods which utilize chemical analysis.

## 3. Handling market

PPE shall be issued in the market that they meet the requirements of this technical regulation of the Customs Union, as well as other technical regulations of the Customs Union, the action of which they are subject, provided that they have passed the confirmation of conformity according razdee 5 of this technical regulation of the Customs Union and under other technical regulations of the Customs Union, the effect of which they are subject.

PPE, conformity to the requirements of this technical regulation of the Customs Union is not confirmed, should not be labeled a single sign of products on the market states - members of the Customs Union and not allowed to be released into circulation on the market. PPE is not a single mark of labeled products on the market states - members of the Customs Union, are not allowed to be released into circulation on the market.

# 4. Safety

4.1. Personal protective equipment should be designed and constructed in such a way that when they are used as intended and meet the requirements for operation and maintenance, they provide:

necessary level of protection of life and human health from hazards and injuries;

no unacceptable risk situations that may lead to hazards;

necessary level of protection of life and human health from risks arising from the use of personal protective equipment;

4.2. Personal protective equipment (except dermatological) must meet the following general requirements:

1) Components (materials and seams) personal protective equipment in contact with the wearer's body, should not have protrusions that can cause skin irritation or injury;

2) Personal protective equipment must not release substances in amounts harmful to human health. Sanitary and chemical safety PPE characterized migration in a model environment to hazardous chemicals in accordance with Table 1 of the N 3 to this technical regulation of the Customs Union:

for components (materials) PPE having direct contact with the outer skin and mucous membranes of the human body, including special clothing in contact with the skin area of more than 5 percent of the allowable amount of migration of chemicals in the aquatic environment of the model should not exceed established this technical regulation of the Customs Union values;

for components (materials) PPE having contact with the inhaled air, including special clothing not in contact with human skin on the area of more than 5 percent, the maximum allowable concentration of chemicals in the air model environment must not exceed the present technical regulation of the Customs Union values;

3) Personal protective equipment and their parts and components (materials) must meet the sanitary-chemical, toxicological and organoleptic and health indicators listed in Table 2 of the N 3 to this technical regulation of the Customs Union;

4) PPE must possess properties that ensure when used as intended by the manufacturer provided the conditions of lack of exposure to these harmful remedies and (or) hazardous agents or users keep worker exposure to these factors do not exceed the limits given in <u>Annex 3 N</u> to this technical regulation of the Customs Union;

5) personal protective equipment must be designed and constructed so that in the conditions of use specified by the manufacturer that the user can carry out their activities, and personal protective equipment to retain their protective properties, safety and reliability;

6) Personal protective equipment must be constructed in accordance anthropometric data user, and the size-range must take into account all categories of users;

7) Ease of use should be provided by adjustment and locking systems, as well as the selection of the size range;

8) personal protective equipment of various kinds, regardless of their design and manufacturing features, designed to ensure the simultaneous protection of different body parts from several simultaneously operating hazardous and (or) harmful factors must be structurally compatible and ergonomic;

9) Personal protective equipment for use in fire and explosion hazard environment, must be made of materials that prevent sparking;

10) Personal protective equipment must have a minimum weight without compromising strength requirements for the design and effectiveness of the protective properties when used;

11) Personal protective equipment for use as a means of self-salvation and (or) salvation, should allow donning (bringing into operation, inclusion) or removal within the time specified on the packaging and in the documentation of the manufacturer;

12) in the documentation for PPE should indicate completeness, or shelf life date, the warranty period (for PPE, losing their protective properties during storage and (or) operation), the secure storage and use (operation and maintenance) transportation and disposal, as well as, if necessary, climatic performance of personal protective equipment and the rules for their decontamination, decontamination, disinfection, as well as ways to confirm their protective properties.

4.3. Personal protective equipment against mechanical impacts must meet the following requirements:

1) in respect of special protective clothing and personal protective hand against mechanical and general industrial pollution:

materials and products for protection against punctures should be resistant to puncture, including not less than 13 N for fabrics, not less than 22 N - for artificial leather and not less than 58 N - for natural leather;

materials and products for protection against cuts should have a resistance to cuts, including not less than 2 N / mm for the tissue at least 6 N / mm - for artificial leather and at least 8 N / mm - for natural leather;

PPE materials hand, abrasion resistant, must be resistant to abrasion, including at least 500 cycles of exposure to the fabric, no less than 1600 cycles of exposure - for artificial leather, not less than 7000 cycles of exposure - for natural leather and abrasion resistance abrasive stone at least 350 cycles of exposure - for knitted fabrics;

special clothing fabric resistant to abrasion, should have a resistance to attrition of at least 500 cycles of exposure;

breaking load materials PPE hands against mechanical impacts must be at least 600 N in the warp and weft 400 N tissue, not less than 350 N for artificial leather, not less than 130 N for leather. Tensile strength of knitted fabrics PPE hands against mechanical impacts must be at least 140 N;

breaking load of tissues special clothes for protection against mechanical impacts must be at least 400 N;

breaking load seams special clothes for protection against mechanical and hand protection against mechanical impacts must be at least 250 N, for materials with less tenacity tenacity of joints shall not be less than the breaking load of materials;

materials and products for protection against non-toxic dust should have dust permeability depending on the defense team, but no more than 40 g / m and remain dust properties after 5 washes or dry cleaners;

2) Manufacturer in the documentation for special protective clothing and hand protection against mechanical and general industrial pollution should indicate their purpose and conditions of use;

3) special clothing from possible capture moving parts must not have external flying components and have tenacity materials and seams, above which in the case of capture affected by the seizure of material components or the adjacent part of the seam PPE will be destroyed without causing harm to the user;

4) Manufacturer in the documentation for the special clothing from possible capture moving parts must specify ranges of values of the breaking load of the attachment components, parts of the product;

5) in respect of PPE hands from vibration:

hand protection from vibration should prevent hand contact with a vibrating surface;

the maximum thickness of the palm of the product with protective padding (in the unstressed state) must not exceed 8 mm;

breaking load of joints should be at least 250 N;

vibration-absorbing materials must ensure the preservation of vibration-absorbing properties, provided by the manufacturer, which should not deteriorate in case of loss or displacement of the mechanical strength of these materials;

6) Manufacturer in the documentation for PPE hands from vibration should specify performance indicators vibration protection and conditions of use (the destination);

7) in respect of personal protective feet (shoes) from vibration:

Shoes must have efficient vibration isolation for at least 2 dB at 16 Hz vibration and not less than 4 dB at a frequency of 31.5 Hz vibration and 63 Hz;

other requirements for the material shoe soles, to the strength of attachment parts of footwear and its other parameters in terms of exposure to vibration as specified in subparagraph 9 of this paragraph;

8) Manufacturer in the documentation for PPE feet vibration must specify a value for the effectiveness of vibration protection (gain);

9) in respect of personal protective feet (shoes) from bumps, cuts and puncture wounds:

shoes depending on the destination should provide protection and equipped with the following safety features: protective socks that provide protection from bumps in the forefoot energy not less than 5 J, safety shields that provide protection from bumps in the rear part of the energy of not less than 3 J, protective shields, providing shock protection at the ankle energy not less than 2 J over liftable shields provide protection from bumps in the lifting of the energy of not less than 15 J, protective shields that provide protection from bumps in the tibia of the energy of not less than 1 J;

shoes for protection against punctures and cuts must be puncture protective gasket and provide a through puncture resistance - not less than 1200 N;

allowed to complete footwear listed safety devices provide simultaneous protection against several harmful mechanical effects;

Internal security clearance protective toe impact energy of 5, 15, 25, 50, 100, 200 joules to be not less than 20 mm;

Shoe sole material must have a strength of not less than 2 N / mm and a hardness less than 70 Shore;

tightness details of a bottom to the top of the shoe should not be less than 45 N / cm (except rubber and plastic shoes). Connection parts of footwear, except for the bottom to the top of the compound should have a tensile strength of at least 120 N / cm;

10) Manufacturer in the documentation for PPE feet from bumps should indicate their purpose and conditions of use;

11) regarding PPE feet (shoes) from slipping:

Chassis soles of shoes (except rubber and plastic footwear) shall have a tensile strength of at least 180 N / cm, and should not reduce it by more than 25 percent over the life;

coefficient of friction on ignition surfaces must be not less than 0.2;

the material requirements for shoe soles, to the strength of fixing parts of footwear and its other parameters listed in paragraph 9 of this paragraph;

12) Manufacturer in the documentation for PPE feet slip must indicate the product shelf-life anti-slip properties and conditions of use (the destination);

13) regarding PPE head (protective helmets)

protective helmets shall not transfer onto the head of a force of 5 kN at the impact energy of at least 50 J, and when exposed to sharp falling objects with an energy of at least 30 J should not be any contact with the head;

protective helmets should provide natural ventilation of the internal space;

Helmets body in contact with live parts must be protected from losses AC, 50 Hz, not less than 440, and in the case of electric arc body helmets should protect against thermal risks not burn and does not melt;

Protective helmets must maintain protective properties in the temperature range specified by the manufacturer. For every protective helmet shall bear Permanently marking (including engraving, stamping, etc.) or hard-to-label with a range of temperatures at which the helmet can be used as well as the level of the dielectric properties and symbols of resistance to lateral deformation and splashes of molten metal (if necessary );

protective helmets should have a system mounts on the head that does not permit spontaneous fall or displacement from the head;

when used in the construction of protective headgear, the chin strap, the width should be no less than 10 mm, and the securing mechanisms should disintegrate at a force of not less than 150 N and not more than 250 N;

lateral deformation of protective helmets in the test no more than 40 mm, and the residual - not more than 15 mm;

position control system of protective helmets on the head should not be after the adjustment and regulation violated spontaneously at all times during use;

14) manufacturer in the documentation for PPE head must specify a range of operating temperatures, the protective properties of the electric current and conditions of use (destination);

15) regarding PPE head from hitting the immovable object (protective caps):

protective caps must not transmit the maximum force on the head of more than 10 kN at the impact energy of at least 12.5 J, and the collision with sharp objects should not be contact with sharps head at impact energy of at least 2.5 J;

Protective caps should provide natural ventilation of the internal space;

when used in the construction of helmet chin strap, its width should be less than 10 mm, and the securing mechanisms should disintegrate at a force of not less than 150 N and not more than 250 N;

16) Manufacturer in the documentation for PPE head from hitting the stationary objects should indicate the purpose and operating conditions;

17) regarding use of personal eye protection (safety glasses), including Non-Ionizing Radiation:

goggles do not have to have projections, sharp edges, burrs or other defects that cause harm or discomfort during use;

goggles designed to protect against high-speed particles, must be resistant to the impact of the kinetic energy of 0.84 joules (low energy impact) and 5.9 J (average energy kick);

Ruggedized goggles must be resistant to the impact kinetic energy of not less than 0.6 J;

in closed glasses indirect ventilation penetration through the vents in eye glasses space dust mix should not be more than 3 mg / min;

the housing side shields and credit points with filters made of a material the transparency of which is not higher than the color filters;

transmittance cover glass substrates and points must be at least 85 percent;

optical parts protective glasses (eyeglasses) should not have optical defects (bubbles, scratches, blotches, turbidity, erosion, traces casting washouts, grain, deepening, flaking and roughness) and have an optical effect, worsening vision, with spherical refraction and astigmatism shall not exceed: for the first optical grade of 0.06 diopters, and the second - 0.12 diopters, prismatic effect in the vertical plane - 0.25 prismatic diopters; horizontally - 0.75 prismatic diopters and 1.00 for the first prismatic diopters for the second optical grade;

the total light transmittance at fogged spectacle glasses should not decrease within 30 minutes more than 10 percent of the temperature difference and the ambient space 15 spectacle 3 ° C and relative humidity of 80 percent 3;

18) Manufacturer in the documentation for PPE Eyes should indicate optical class, protective properties and conditions of use (the destination);

19) regarding PPE face (facial protective shields)

protective shields facial equipped with control systems must be designed and constructed so that their adjustment does not spontaneously broken in the operation;

Adjustment of protective facial shields should be without removing the product from the head, with the mount on the head should not move;

protective shields facial filters should be painted in addition to the main mass and optical action (filter) should not have an additional optical effect, causing deterioration of visual perception. Additional optical filters action shall not exceed the values specified in paragraph 17 of this clause;

protective shields face must have a weight of not more than 0.65 kg and be resistant to impact with a kinetic energy of not less than 0.6 J;

protective facial shields designed to protect against high-speed particles, must be resistant to the impact of the kinetic energy of 0.84 joules (low energy impact), 5.9 J (average energy kick) and 14.9 J (high-energy impact);

optical parts of the protective shields facial (inspection and protective cover glass, screens) should not have an optical effect, causing deterioration of visual perception. Optical effect of these parts must not exceed the values specified in paragraph 17 of this clause;

20) manufacturer in the documentation for PPE persons should indicate the protective properties and operating conditions with the list and levels of exposure to harmful and dangerous factors that are protected;

21) regarding use of personal protective equipment against falls from a height:

in fall arrest systems designed to stop the fall, the force transmitted to the person at the time of the fall, using a safety leash must not exceed 6 kN;

using restraint tether force transmitted to a person, should not exceed 4 kN;

components and connectors, fall arrest and restraint systems must withstand a static load of at least 15 kN and slings made from synthetic materials - not less than 22 kN;

PPE against falls from a height shall be constructed, eliminating back injury while performing work, including in uncomfortable positions, human loss of personal protective equipment, as well as spontaneous separation connecting elements PPE;

PPE against falls from a height must withstand dynamic stresses resulting from falling mass of 100 kg from a height of 4 m, 2 m and 1 m, and holding a leash (safety belt without strap) - with a height equal to two maximum line length;

fasteners PPE against falls from a height should prevent inadvertent opening and placed in front;

maximum length of slings, including the length of end connections considering damper should be no more than 2 m;

carbine design should exclude the accidental discovery, as well as to exclude pinched and hand injuries while working with it;

Materials connecting elements must be resistant to corrosion, metal parts should not be placed in direct contact with the human body except the hands;

for individual life-saving devices (IMS) establishes additional security requirements:

MIS should ensure the effective and safe use of any user, regardless of the architectural complexity of the building (structure), to be constantly ready for use;

ISU should exclude the possibility of free rotation and fall Users downhill, as well as sudden cardiac descent;

descent rate in the MIS should be provided automatically and does not exceed 2 m / s;

MIS should be able to determine whether the use of in order to prevent re-use, and exclude the possibility of danger to the user after the descent;

ISU components must be resistant to high temperatures, biological effects and maintain their performance after these impacts;

22) manufacturer in the documentation for personal protective equipment against falls from a height shall indicate the total length of a safety system with lanyard, including shock, end fittings and connectors and climatic conditions of application, ISU further specifies the maximum height of the shutter;

23) regarding PPE hearing organ:

pulling force to the head headphones around the ear should be at least 8 N and not more than 14 N;

pressure gaskets headphones should not exceed 4500 Pa;

components earphone should not burn or smolder after contact with a hot object;

earplugs for use in the food and pharmaceutical industries, should have detected metal components;

when using headphones, combined with a helmet, headband pressing force equivalent shall not exceed 14 N, and if this means for adjusting said force should be set at no more than 14 N;

the mean value of the contact pressure equivalent headband when using headphones, combined with the helmet should not be less than 8 N;

pressure damper headphone combined with a helmet should not exceed 4500 Pa and in the presence of headphones combined with a helmet, a device for clamping force control equivalent headband should set the maximum contact pressure of not more than 14 N;

fastening means Hearing protectors should provide at least 2500 cycles stretching, while the contact pressure should not decrease by more than 15 percent relative to the initial value;

earplugs should be of the form allows you to enter and retrieve them from the external auditory canal or the ear without causing discomfort and injury to the user;

24) the manufacturer on the packaging and in the documentation for PPE organ of hearing shall specify the protective properties of the PPE and conditions of use (the destination).

4.4. Personal protective equipment against chemical agents must meet the following requirements:

1) against the insulating suits (including used to protect against biological agents)

when the forced air supply to the space and breathing zone must be supplied in an amount not less than  $150 \, \text{l} / \text{min}$ , the overpressure under suit space should not exceed 300 Pa and the temperature of air in the breathing zone should not be higher than  $+50 \,^{\circ}$  C with a relative humidity of 30 percent and  $+60 \,^{\circ}$  C at a relative humidity of less than 30 percent;

at the sudden (emergency) system shutdown forced air in the breathing zone of the costume design should ensure the smooth natural person's breathing air at a flow rate of at least 601 / min;

breathing resistance should not exceed 200 Pa to 160 Pa and inhale exhale in suits autonomous insulating and 80 Pa exhale in suits insulating hose at a

constant air flow rate of  $0.5 \times 10$  m / s;

amount of air supplied to suit the insulating hose, should be less than  $4,2 \cdot 10$  m / s (250 liters / min), including the breathing zone of at least 2.5  $\cdot$ 

 $10 \quad m \quad / \ s \ (150 \ liters \ / \ min) \ ;$ 

volume content of carbon dioxide in the inspired air should not exceed 2 per cent, and oxygen must be at least 18 percent;

air temperature when it forced submission to under suit space should be between +18 ° C to +23 ° C at a relative humidity of 30 to 60 percent (other than suits with independent forced air);

reduction in the area of the field of view in the insulating suit should not exceed 30 percent of the field of view without the insulating suit;

Costume design insulation must allow transmit and receive audio, visual or transmitted using special devices information while stunning sound in speech frequencies should not exceed 10 dB, reducing the perception of speech should not exceed 15 percent of transmitted speech intelligibility - not less than 80 percent of the words, and for jobs requiring higher quality communication - not less than 94 percent of the words;

sound level produced by the flow of air as it forced feeding, should not exceed 70 dB;

Costume design should prevent wicking insulating under suit space in water and solutions supplied to him by irrigation for at least 10 minutes; Costume design insulating, its weight and its distribution over the surface of the body should not cause limited mobility and operability member, preventing the performance of their works within the specified operating conditions PPE movement and evacuation in case of emergency, and the weight of the costume insulating hose should not exceed 8.5 kg, and autonomous - 11 kg;

suit must maintain its insulating properties, providing a predetermined rate of protection, after appropriate kinds of cleaning for the duration of operation, and should not reduce its strength in service for more than 25 percent of the value declared by the manufacturer;

suits against isolating designed to operate in adverse microclimatic conditions should be possible to use devices that provide insulation, lead or applying heat;

2) manufacturer in the documentation to the costumes should indicate insulating protection factor and the conditions under which it is achieved, the maximum protective action indicating influencing factors, the duration of continuous use and the conditions under which this can be achieved, methods, techniques and multiple degassing (if provided);

3) with respect to the insulating personal respiratory protection:

Each article should have an identification number painted on the product packaging and in the documentation;

limit the field of view area allowed for no more than 30 percent of all of the respiratory protection of this type, except for helmets, masks and breathing apparatus, goggles and mask, complete;

personal respiratory protection must be capable of determining the primary products bring into operation or autopsy;

temperature of the inhaled PPE respiratory mixture should not exceed 60  $^{\circ}$  C for PPE respiratory protective action with time up to 15 minutes and 55  $^{\circ}$  C - with a time of protective action for more than 15 minutes;

personal respiratory protection after exposure to an open flame with a temperature of 800 ° C for 5 seconds should not ignite and burn after removal of the flame;

volume fraction of inspired oxygen should not be less than 21 percent in the initial period of use permitted dips oxygen volume fraction up to 19 percent at the time of no more than 3 minutes;

personal respiratory protection and their constituent components must be sealed;

sound level produced by the flow of air as it forced feeding, should not exceed 70 dB, and the presence of warning device sound level emitted by them, must be at least 80 dB;

elastic components at their presence in the construction of personal respiratory protection should not stick together during prolonged storage in a collapsed state;

personal respiratory protection should withstand the loads arising in the same incidence of personal respiratory protection with a height of 1.5 m onto a concrete floor;

controls of personal respiratory protection - breathing apparatus (valves, levers, buttons, etc.) should be available to bring them into action, protected from mechanical damage and accidental operation and shall operate with a force not exceeding 80 N, for breathing apparatus intended for underground work - not more than 196 N;

4) the manufacturer on the packaging and in the documentation for all insulating PPE respiratory protection factor should indicate, the lowest temperature rating regenerative cartridge (if any), breathing resistance inspiratory and expiratory Holdover time, duration of continuous use and

conditions in which this is achieved, the rules of safe operation, accounting rules, storage and transportation by excluding heating, drop, knock, and unauthorized access, recycling regulations with regard to the need to conduct its specialized organizations designated by the manufacturer, the general restrictions on use due to age, health and other physiological characteristics of users that may affect the safe use of personal respiratory protection rules for the preparation (training) and User Access to the operation;

5) in respect of insulating PPE respiratory chemical oxygen:

this tool respiratory protection should provide respiratory protection and vision and have the protection factor of at least 2.10 ;

breathing resistance inspiratory and expiratory pulmonary ventilation at 70 dm / min should not exceed 1960 Pa, and pulmonary ventilation at 35

dm / min should not exceed 980 Pa;

carbon dioxide content of the inhaled air for the time of the direct use personal respiratory protection should not exceed 3 per cent, in freezing conditions in the first 6 minutes of permitted short-term (less than 3 minutes) increase in the volume fraction of carbon dioxide in the inspired gas mixture respiratory to 5 percent;

dust regenerative product should not fall into the airway member, saliva or condensate should not hinder the work of personal respiratory protection and adversely affect the user;

surface temperature of personal respiratory protection, facing the wearer's body, should not cause discomfort to the user, and design personal respiratory protection must include protection of human burns during use;

Connection elements duct system must withstand a force of at least break 98 N;

breathing apparatus intended for underground work must be resistant to crushing force 98 kN in vertical and inclined positions and force 392 kN - in a horizontal position;

6) With respect to the insulating PPE respiratory compressed air (oxygen)

this tool respiratory protection without excess pressure under the front part should provide respiratory protection and eye protection and have a

coefficient of at least 2.10 ;

personal protection Respiratory pressurized under the front part should provide respiratory protection and eye protection and have a coefficient of at

#### least 1.10 ;

the volume fraction of carbon dioxide in the air breathed in space under mask personal respiratory protective insulating type compressed air should not exceed 1.5 per cent in pulmonary ventilation 30 dm / min and carbon dioxide generation 1 dm / min;

this tool respiratory protection (except for self-rescuers on compressed air (oxygen)) must have a signaling device in advance indicates the end of compressed air (oxygen) in the tank, while sound level produced by the audible warning device at the entrance of the external auditory passage person must be at least 80 dB, and the frequency response of the sound should be 800-5000 Hz;

breathing resistance should not exceed 400 Pa inspiratory and expiratory 500 Pa at 30 dm pulmonary ventilation / min for respiratory devices without

excessive pressure should not be less than 0 Pa on inspiration and more than 600 Pa expiratory pulmonary ventilation at 30 dm / min for breathing apparatus with pressurized;

Hose Connection elements SCBA duct system must withstand a force of not less than 98 gap H, hose must maintain integrity and withstand a tensile force of 50 N without reducing the air supply by more than 5 percent, and the elastic components of personal respiratory protection should not stick together long-term storage in a collapsed state;

air used for charging the container (s) personal respiratory protection, compressed air must be dried, cleaned from mechanical impurities and must not contain any traces of oil, as well as harmful to breathe more substances maximum permissible concentrations of carbon dioxide - 0.1 percentage volume

of carbon monoxide - 8 mg / m  $\,$  , for nitrogen oxides - 0.5 mg / m  $\,$  , hydrocarbons (in terms of carbon) - 50 mg / m  $\,$  ;

Drugs in respiratory protection, compressed air (oxygen) should be possible to control the air pressure in bringing them into working position, and for self-rescuers on compressed air (oxygen) - in the standby position of use;

cylinders or valves of personal respiratory protection, compressed air (oxygen) must have a safety device, precluding the possibility of rupturing the cylinder due to its heating. Suffers from a lack of the safety device when using cylinders collapsing shatterproof;

cylinders PPE respiratory compressed air (oxygen) must comply with the laws of the State - a member of the Customs Union on the vessels and equipment working under pressure;

documentation for each cylinder should contain information about the manufacturer, information on conformity to the requirements, conditions of use and maintenance of cylinders in accordance with its purpose and design, the operating pressure in the tank, capacity, weight, lifetime cylinder rejection criteria (for metal- and composite cylinders), the rules and procedures of technical inspection of the cylinder, place the information to fill the procedures for examination, the mark of acceptance of the product, the manufacturer's warranty, safety requirements;

7) with respect to the filter of personal respiratory protection, including self-rescuers:

you cannot use the filter of personal respiratory protection when the content of oxygen in the inspired air less than 17 percent;

Restriction of the field of vision is not more than 30 per cent;

carbon dioxide content of the inhaled air filtration means for respiratory protection should not exceed 1 percent (volume);

filter means respiratory protection must maintain their performance after mechanical and thermal effects;

filtering components of personal respiratory protection insulating face piece that can be exposed to direct flame during use, after exposure to an open flame with a temperature of 800 ° C (turn over an open flame at 180 ° C for 5 seconds) should not be easily ignited and burn after removal of the flame;

filter media in respiratory protection for use in conditions of possible fire or explosion hazard situations shall not be used pure aluminum, magnesium, titanium or alloys containing these materials in proportions that during operation can cause sparks;

mass filter (s) attached directly to the front of the filter personal respiratory protection should not exceed 200 g for mouthpiece (mouthpiece), 300 g - for respirators and 500 g - for masks, filters with greater weight must be connected to the front of the via the connecting tube;

filter materials and gaseous products are taken out of the flow of air filter should not cause harm to the user and cause him discomfort;

8) filter personal respiratory protection depending on their effectiveness are divided into three classes - low, medium and high efficiency;

9) kinds of substances which are protected, their concentrations, and safety characteristics of personal protective equipment should be specified by the manufacturer by applying the appropriate markings on the filter means respiratory protection, on its packaging, as well as contained in the documentation for a particular product;

10) in relation to the filter of personal respiratory protection filtering half-mask and in addition to the requirements of paragraphs 7-9 of this paragraph:

aerosol penetration coefficient - for the test substance - sodium chloride and the test substance - oil mist through the Particle tool should not exceed 22 percent, 8 percent and 2 percent, respectively, for products of low, medium and high efficiency;

permeability of the filter material - on the test substance, sodium chloride and the test substance oil mist at a rate constant air flow 95 dm / min should

not exceed 20 percent, 6 percent and 1 percent, respectively, for products of low, medium and high efficiency or consumption constant air flow 30 dm / min should not exceed 16 percent, 2 percent and 0.4 percent, respectively, for products of low, medium and high efficiency;

initial resistance PPE respiratory air flow must not exceed the inspiratory flow at a constant air flow 30 dm / min 60 Pa, 70 Pa and 100 Pa for personal

respiratory protection, respectively low, medium and high efficiency; expiratory flow at a constant air flow of 160 dm / min - 300 Pa for PPE Respiratory any efficiency;

in the presence of an exhalation valve in the filter half mask it must be protected from dirt and mechanical damage;

exhalation valve must keep working for a stated period of storage manufacturer personal respiratory protection;

air resistance on inspiration after dust filter respirator with exhalation valves with flow constant air flow 95 dm / min should not exceed 400 Pa, 500 Pa and 700 Pa for respirators, respectively low, medium and high efficiency;

resistance to air flow filter respirator with exhalation valves after the dust on the exhale should not exceed 300 Pa at a constant flow rate of air flow 160

dm / min;

airflow resistance inspiratory and expiratory after dust filter respirator without valves with flow constant air flow 95 dm / min should not exceed 500 Pa;

airflow resistance inspiratory and expiratory after dust filter respirator without valves with flow constant air flow 95 dm / min should not exceed 300 Pa, 400 Pa and 500 Pa, respectively, for products of low, medium and high efficiency;

11) against Particle personal respiratory protection insulating face piece and in addition to the requirements of paragraphs 7-9 of this paragraph:

factor choke under the front of the test substance on - spray mist and the test substance - sodium chloride aerosol should not exceed 2 per cent for products with a half-mask (the quarter mask), 1 percent - for products with a mouthpiece and 0.05 percent - for products with a mask;

airflow resistance respirators / quarter masks not exceed 200 Pa to 300 Pa, inspiration and exhale when exposed to pulsating air flow 25 cycles / min (2.0

dm / stroke) or constant flow rate of air flow 160 dm / min;

design of inhalation and exhalation valves shall exclude functioning exhalation valves in the inspiratory cycle valve or inspiratory-expiratory cycle;

exhalation valve must be protected from dirt and mechanical damage;

exhalation valve must keep working for a stated period of storage manufacturer personal respiratory protection;

initial resistance of the particle filter constant air flow rate of 30 dm / min should not exceed 60 Pa, 70 Pa and 100 Pa, respectively, for products of low, medium and high efficiency;

coefficient of permeability test substance - oil mist and test substance - sodium chloride at a rate of air flow 95 dm / min should not exceed 20 percent, 6 percent and 0.05 percent, respectively, for filters of low, medium and high efficiency;

airflow resistance inspiratory and expiratory after dust filters at a rate constant air flow 95 dm / min should not exceed 400 Pa, 500 Pa and 700 Pa, respectively, for products of low, medium and high efficiency;

12) With respect to gas filters of personal respiratory protection insulating face piece and in addition to the requirements of paragraphs 7-9 of this paragraph:

factor choke under the front of the test substance sulfur hexafluoride shall not exceed 2 percent for products with a half-mask (chetvertmaskoy), 1 percent - for products with a mouthpiece and 0.05 percent - for products with a mask;

requirements for facial parts used in gas filters means of individual respiratory protection insulating face piece except suction coefficient similar to the requirements of the facial parts of the particle of personal respiratory protection;

anti-gas filters are divided into grades and classes, depending on the efficiency of fumes and gases hazardous and noxious substances and their concentrations on which they provide protection:

Grade A - of an organic gases and vapors with a boiling point above 65 ° C;

Label - protection of inorganic gases and vapors, with the exception of carbon dioxide, and other substances, which shall specify the manufacturer;

Brand E - for the protection of the sulfur dioxide and other acidic gases and vapors;

Brand K - for protection from ammonia and its organic derivatives;

AH Brand - protection of organic gases and vapors with a boiling point not exceeding 65 ° C;

Brand SX - for protection against carbon monoxide (CO) and other gases and vapors, not named in the other brands;

Brand NgR3 - to protect against mercury vapor;

Brand NOR3 - protection of nitrogen oxides;

filters and brands NgR3 NOR3 should be only high efficiency;

gas filters initial resistance to air flow at 30 dm / min should not exceed 100 Pa, 140 Pa and 160 Pa for the filters, respectively low, medium and high efficiency;

13) against gas masks(combined) filtering of personal respiratory protection insulating face piece and in addition to the requirements of paragraphs 7-9 of this paragraph:

requirements for facial parts used in this type of personal respiratory protection, similar to the requirements of the facial parts-protection of personal respiratory protection;

gas masks (combined) filters must be subdivided into grades and classes, depending on the efficiency of aerosols, vapors and gases, haz ardous and noxious substances and their concentrations on which they provide protection similar to gas filters;

initial resistance combined filters air flow must not exceed 160 Pa, 200 Pa and 280 Pa at 30 dm / min for products of low, medium and high efficiency,

respectively; and 820 Pa, 980 Pa and 1060 Pa at 95 dm / min for production of low, medium and high efficiency, respectively;

resistance to air flow after the filter dust at 95 dm / min should not exceed 1040 Pa for the products and the low efficiency of 1060 Pa for the products of medium and high efficiency;

coefficient of permeability test substance 5 percent of sulfur hexafluoride product inefficiency and 2 percent for medium and high production efficiency;

14) in relation to the filter self-rescuers and in addition to the requirements of paragraphs 7-9 of this paragraph:

universal filter self-rescuers should provide respiratory protection, eye and skin of the human head with a relative humidity of 98 per cent of the different nature of aerosols, vapors and gases, hazardous chemicals at least 4 groups according to grades of filters (A, B, E, K) specified in paragraph 12 of this clause;

special filter self-rescuers should provide respiratory protection or respiratory organs, eyes and skin of the human head from one or more damaging

#### factors (substances);

permeability coefficients for the test substance - spray mist or test substance - sodium chloride aerosol via a universal filter self-rescuer should not exceed 2 per cent, 1 per cent and 0.01 per cent - for these self-rescuers, respectively low, medium and high efficiency;

coefficients choke on test substance - spray mist or test substance - sodium chloride aerosol in the breathing zone and the zone of the eye to filter self-rescuers should not exceed 6 percent, 2 percent and 1 percent, respectively, for self-rescuers low, medium and high efficiency and on the test substance - sulfur hexafluoride shall not exceed 2 per cent for the low efficiency of products, 1 percent for the average efficiency of products and 0.1 percent for high-efficiency products;

in the filter self-rescuer breathing resistance with an air flow of 95 dm / min should not exceed 800 Pa. inspiratory and expiratory - 300 Pa;

carbon dioxide content in the inspired air should not exceed 2 per cent;

driving time operating condition of the filter self-rescuer should not exceed 60 seconds;

porthole filter self-rescuer should not distort the visibility and mist throughout the holdover time;

filter self-rescuers must have a mass less than 1 kg;

15) in relation to the filter self-rescuers used at fires, except for the requirements under subparagraph 14 of this paragraph shall apply the requirement to provide a period of not less than 30 minutes of respiratory protection, eye and skin of the human head from the combustion products - aerosols (fumes), organic vapors and gases, inorganic acid, inorganic basic materials as well as carbon monoxide in excess of the maximum allowable content of toxic substances. Level of the maximum permissible content for each substance is established in the regulations on fire safety countries - members of the Customs Union;

16), the manufacturer of the filter of personal respiratory protection provided by subparagraphs 7-15 of this paragraph in the documentation, and (or) on the packaging to the product must state the types of substances which are protected, their concentration, the protection factor, especially the use of PPE respiratory organs, the age-users and their physiognomic features (head size, the geometric parameters of the face and neck, the presence of beard, mustache, long hair, glasses and facial defects);

17) in terms of clothing and special protective clothing protective filter, and hand protection from chemical factors:

clothing for protection against precipitation must be water-resistant at least 1800 Pa, and when exposed to jets of water - at least 3000 Pa;

clothing for protection against acids and materials for its manufacture must be acid protective and preserve ACID properties after 5 washes or dry-cleaners, the loss of strength of materials from the effects of acid should not exceed 15%;

clothing for protection against alkali and materials for its manufacture must have alkaline permeability in accordance with established groups and save alkali protective properties after 5 washes or dry-cleaners, loss of strength from exposure to alkaline materials should not exceed 15%;

clothing for protection against oil and petroleum products and materials for their production should be oil proof and oil resistant, save protective oil properties after 5 washes or dry cleaners, loss of strength of materials from exposure to oil and oil products should not exceed 15%;

wear protective filter should provide protection against gases, vapors, aerosols, chemicals specified by the manufacturer; maintain protective properties for 12 or more months of service, after six or more washes, dry cleaners, neutralization (degassing); should be combined with RPE, PPE arms and legs, it should be leak-proof design (full cover skin) products; ambient air should be supplied to the space under suit by filtration through the filter bag protective clothing materials; it must be operated in the "tight" when there is an excess of MPC in the working area; if the concentration of hazardous and (or) the pollutants does not exceed the permissible level, it is operated in a depressurized form - in the "ready" mass filter protective clothing should not exceed 3.8 kg;

hand protection from chemical factors must be waterproof, acid and alkaline permeability should be no more than 1.0 units. pH;

18) manufacturer in the documentation for special protective clothing, protective clothing and filter Hand protection from chemical factors should indicate the time of protection, and conditions of use (the destination);

19) regarding use of personal protective eyewear (goggles) of chemical factors:

personal eye protection must meet the requirements provided in subparagraph 17 of paragraph 4.3 of the technical regulations of the Customs Union;

eyeglasses protective glasses should not have an optical effect, causing deterioration of visual perception;

sealed goggles should protect your eyes from drops of chemical products, as well as gas, vapor and aerosols;

20) manufacturer in the documentation for PPE eyes from chemical factors should indicate optical class, protective action, types of chemical substances which are protected, their concentration and physical state;

21) regarding PPE feet (shoes) from chemical factors:

strength reduction factor of fixing of the bottom of the shoe from exposure to chemical factors must be less than 0.5, the strength reduction factor of thread fastening parts of uppers from exposure to chemical factors must be not less than 0.6;

the material requirements for shoe soles, to the strength of fixing parts of footwear and its other parameters as specified in subparagraph 9 of paragraph 4.3;

22) manufacturer in the documentation for PPE feet from chemical factors should indicate the time of protection, and the conditions under which this protective effect is achieved, as well as storage conditions.

4.5. Personal protective equipment against radiation factors (external ionizing radiation and radioactive substances) must meet the following requirements:

1) With respect to general requirements for PPE of radiation factors (external ionizing radiation and radioactive substances):

PPE materials from beta radiation should not contain the chemical elements with atomic number greater than 30;

protection factors of beta radiation and soft photon radiation (60 keV) must be at least 3;

permeability of the filter self-rescuers on radioactive substances in the vapor concentration of iodine-131 and methyl iodide, 10 Ci/m should not exceed 2 per cent for the low efficiency of products, 1 percent for the average efficiency of products and 0.1 percent for high-efficiency products;

decontamination factor for the outer casing of insulating suits of textile materials with rubber-coated insulating elastomeric materials for face pieces of personal respiratory protection, as well as basic materials for footwear and PPE head, eye and face must be at least 10;

decontamination factor for the material of the outer shell suits insulating plastic coating and film, for plastic and metal materials insulating face pieces of personal respiratory protection and protective clothing materials for special and extra special shoes must be at least 20;

PPE materials except PPE disposable must maintain protective properties after 5 cycles of pollution - Decontamination:

breaking load of these materials and their tear resistance shall not be reduced by more than 10 percent;

material shrinkage after 5 Deactivation must not exceed 3.5 per cent;

special protective clothing and hand protection must comply with the requirements of subparagraph 17 of paragraph 4.4 of this technical regulation of the Customs Union;

personal eye protection must meet the requirements of subparagraph 19 of paragraph 4.4 of this technical regulation of the Customs Union;

PPE feet must comply with subparagraph 21 of paragraph 4.4 of this technical regulation of the Customs Union;

2) manufacturer in the documentation for PPE of radiation factors (external ionizing radiation and radioactive substances) should indicate protection factors and conditions under which these coefficients are obtained, as well as tools, methods and decontamination factor (if decontamination is provided by the manufacturer);

3) with respect to the insulating suits to protect the skin and respiratory system from radioactive substances:

insulating suits when removing and equipped shall exclude the danger of contamination of the user;

Costume design insulating his tailoring and mass distribution should not hamper and obstruct the movement of the user more than 30 percent with respect to motions without a suit;

weight insulating suit without breathing apparatus must not exceed 8.5 kg, and with breathing apparatus - 20 kg; insulating suits must have a protection factor of at least 2000;

Costume design insulation should prevent wicking space under suit in water and solutions supplied to him by irrigation for at least 10 minutes;

breaking load of the materials used for the manufacture of insulating suits decontaminated, shall be at least 150 N, and for costumes indivisible - not less than 60 N;

abrasion resistance of the materials used for the manufacture of insulating suits decontaminated, shall be not less than 1500 cycles, and for costumes durable - at least 100 cycles;

resistance to bending of the materials used for the manufacture of insulating suits decontaminated, shall be not less than 20,000 cycles, and for costumes durable - not less than 2000 cycles;

puncture resistance of the materials used for the manufacture of insulating suits decontaminated, shall be at least 100 N, and for costumes durable - not less than 10 N;

tear resistance of materials should not be less than 20 N for PPE single application and not less than 40 N - PPE for repeated use;

stiffness of coated materials should not exceed 0.2 N and the stiffness of the film material with a thickness of 0.25 mm - less than 0.02 N;

strength welds products should be less than the strength of the materials from which they are made, and another type of joint strength - at least 100 N;

strength costumes should not deteriorate in service for more than 25 percent of the value declared by the manufacturer in the documentation;

carbon dioxide content in the inspired air should not exceed 1 percent of the volume;

requirement for the amount of air supplied to suit the insulation must meet the requirements provided in subparagraph 1 of paragraph 4.4 of this technical regulation of the Customs Union;

using audio devices (light) alarm shall be provided to alert the user of the need to use the device for emergency maintenance respiration and exit from exposure radiation factor. At the same time the sound level should be between 85 to 90 dBA in a person's ear with a range of audio frequencies from 2000 to 4000 Hz;

restriction of the visual field area should not exceed 30 percent. When using a sight glass may decrease visual acuity of not more than 2 lines of eye chart, and the mechanical strength of sight glasses must meet the requirements of the impact energy in subparagraphs 17 and 19 of paragraph 4.3 of the technical regulations of the Customs Union;

overpressure inside the suit insulation should not exceed 1000 Pa and the average value of 2000 Pa - by the maximum value, and should be maintained during the application of this type of personal protective equipment;

connection between the suit and the outer hose suits insulating hose must withstand tensile force of 250 N. When exposed to hose tensile force of 50 N air flow should not be reduced by more than 5 percent, and the elongation of the hose shall not exceed 200 percent of the original length;

4) manufacturer in the documentation to suits insulating to protect the skin and respiratory system from radioactive substances must indicate the protection factor and the conditions under which it occurs, means, methods and decontamination factor (if decontamination is provided by the manufacturer) and the duration of safe continuous use;

5) in respect of personal respiratory protection (including filter) from radioactive substances:

isolating means respiratory protection must meet the requirements of paragraph 3, 5 and 6 of paragraph 4.4 of this technical regulation of the Customs

Union;

filter personal respiratory protection, including radioactive substances must comply with sub-paragraph 4.4 of this 7-14 technical regulations of the Customs Union;

protection factor of the filter of personal respiratory protection with facial parts of the filter materials from radioactive aerosols must be at least 50, and the inhalation and exhalation resistance - not more than 60 Pa at a constant flow rate of air flow 30 dm / min for protivogazoaerozolnyj personal respiratory protection and not more than 50 Pa at a constant flow rate of air flow 30 dm / min for Particle personal respiratory protection;

protection factor of the filter of personal respiratory protection with facial parts of insulating materials from radioactive aerosols must be at least 500, and inhalation and exhalation resistance - less than 200 Pa at a constant flow rate of air flow 30 dm / min

6) manufacturer in the documentation to the filter means of personal respiratory protection against radioactive substances must indicate the protection factor of aerosols and protective action of gases and vapors, as well as the conditions under which these are achieved and the time factor.

4.6. Personal protective equipment against low temperatures, high temperatures and thermal radiation must meet the following requirements:

1) in respect of special clothing and personal protective hands of convective heat, radiant heat, contact with a heated surface, brief contact with a heated surface, sparks, spatter and molten metal splashes:

special clothing and hand protection should ensure the temperature of the inner layer as defined in subparagraph 4 of Table 2 of the N 3 to this technical regulation of the Customs Union, all the time use under the conditions specified by the manufacturer, in this case:

convective heat transfer rate should be not less than 3 seconds during the passage of the heat flux of 80 kW / m through the material which has undergone at least 5 cycles of washings (dry cleaners) - dryers;

index of thermal radiation transfer must be at least 8 seconds while passing the heat flux density of 20 kW / m through the material which has undergone at least 5 cycles of washings (dry cleaners) - dryers;

clothing materials and special PPE hands after not less than 5 cycles of washings (dry cleaners) - dryers then holding them in the flame for 30 seconds should not burn, smolder and melt when setting out from the flames and smoldering combustion residual is not allowed;

breaking load of joints should be at least 250 N;

breaking load of clothing fabrics and special hand PPE for protection against sparks and molten metal splashes should be at least 800 N, tearing load of at least 70 on the basis of H and 60 N Weft, PPE for protection against radiant heat should have a resistance to flexing not less than 9000 cycles;

resistance of the materials used in special clothing and hand protection for protection against sparks and molten metal splashes, to the action heated up to a temperature of 800  $^{\circ}$  C 30 burns element must be at least 50 seconds for the overlays and 3-class protection products; not less than 30 seconds - for the single layer of material or at least 50 seconds for the two layers of material (the base material and the protective cover) to protect the products of class 2;

resistance of the materials used in special clothes, exposed to sparks and molten metal splashes must be at least 30 drops for one class of protection;

Materials used in the special clothing and personal protective equipment for protecting hands from splashes of molten metal s plash must withstand a molten metal mass of at least 60 g within 30 seconds without adhesion on the metal material and the outer layer without damaging the wearer's skin;

materials used in clothing and special hand protection to protect against contact heat must withstand contact with surfaces heated to 250 ° C for at least 5 seconds;

2) manufacturer in the documentation for special clothing and personal protective hands of convective heat, radiant heat, sparks and molten metal splashes should indicate the purpose of this personal protection, protection class and degree of protection, including the limiting temperature;

3) in respect of special clothing and personal protective hands from exposure to low temperatures:

special clothing, depending on the climatic region, time of continuous residence in the cold, the air permeability of the material and the top view of the gravity of the work must have thermal insulation properties: thermal insulation kit, consisting of special protective clothing, PPE hands, PPE head and feet, ranging from 0,451 up to 0,823 ° C · m / W, and the total thermal resistance of the package special clothing materials defined degree of protection should not be less than 0,50 ° C · m / W;

breathability of the upper layer of clothing materials or special package must not exceed 40 dm  $\,$  / m  $\,$  · s;

4) manufacturer in the documentation for PPE against low temperature operating conditions must indicate the recommended climatic zones (regions);

5) autonomous heat sources placed under the outerwear and footwear for all the work specified by the manufacturer, should not create conditions for improving the human skin surface temperature over +40  $^{\circ}$  C, the working surface of the heat source should not heat up to more than + 65  $^{\circ}$  C;

6) manufacturer in the documentation to the autonomous heat source that is placed under the outerwear and footwear, must indicate its temperature parameters on the surface of the heat source (nominal, minimum and maximum temperature), long the source and the conditions under which these parameters are achieved;

7) in respect of personal protective feet (shoes) from elevated and (or) low temperatures, contact with a heated surface, sparks and molten metal splashes:

Shoes should prevent ingestion of sparks and molten metal splashes and be resistant to short to an open flame;

strength reduction factor of fixing of the bottom of the shoe nailed fastening method of exposure to elevated temperatures up to +150 ° C should be at least 0.85;

Shoes are designed for use in conditions of low temperatures, should retain their protective properties in the temperature range specified by the manufacturer (climate zone) throughout the life of the standard;

the material requirements for shoe soles, to the strength of fixing parts of footwear and its other parameters as specified in subparagraph 9 of paragraph 4.3;

tightness details of a bottom to the top of the shoe should be at least 120 N / cm;

Shoe sole material must possess thermal shock resistance of at least 160 ° C;

8) manufacturer in the documentation for PPE feet (shoes) from elevated and (or) low temperatures, contact with a heated surface, sparks and molten metal splashes should indicate the protective properties and conditions of use (the destination);

9) in respect of personal protective head used in conditions of high and (or) low temperatures (protective helmets)

protective helmets must prevent the penetration of molten metal through the helmet shell (body not ignite after 5 seconds after contact with molten metal or open flames);

Protective helmets designed for operation at high and (or) low temperatures, shall retain their protective properties under ambient temperature range specified by the manufacturer;

protective helmets for mechanical properties, resistance to perforation and amortization must meet the requirements provided in subparagraph 13 of paragraph 4.3 of the technical regulations of the Customs Union;

10) manufacturer in the documentation for PPE from head elevated and (or) low temperatures should indicate the protective properties and conditions of use (the destination);

11) regarding use of personal protective eyewear (goggles) and face (facial protective shields) from molten metal splashes and hot particles:

Minimal field of view on the faceplate of the central vertical line should be at least 150 mm;

personal protective eyewear (goggles) and face (facial protective shields) on the impact energy shall meet the requirements specified in subparagraphs 17 and 19 of paragraph 4.3 of the technical regulations of the Customs Union;

personal eye protection should be resistant to penetration by these hot solids at the time of continuous exposure, not less than 7;

Spectacle glass reflecting infrared range, should have the spectral reflection factor of more than 60 percent in the wavelength range from 780 nm to 2000 nm;

thickness sight glasses should be at least 1.4 mm;

12) manufacturer in the documentation for personal protective equipment for eyes and face from splashes of molten metal and hot particles should indicate the protective properties and conditions of use (the destination).

4.7. Personal protective equipment against thermal hazards of an electric arc, non-ionizing radiation, electric shock, as well as from the effects of static electricity must meet the following requirements:

1) in respect of special protective clothing against thermal risks of electric arc:

Clothing for protection against thermal hazards of an electric arc must be used complete with of underwear, PPE head, face, hands, feet;

level of protection of special protective clothing against thermal risks arc determined after 5 cycles of washings (dry cleaners) - dryers should not decrease by more than 5 percent of the original level after 50 cycles of washings (dry cleaners) - dryers;

values of resistance of materials with special protective clothing against thermal hazards of an electric arc to mechanical stress and air permeability index should not decrease by more than 20 percent after 50 cycles of washings (dry cleaners) - dryers;

value of surface resistivity materials suitable protective clothing against thermal risks of an electric arc after 50 cycles of washings (dry cleaners) -

dryers should not exceed 10 ohms;

special clothing, gloves, heat-resistant, heat-resistant underwear, balaclavas must be made of heat-resistant materials with constant heat resistant properties and comply with the requirements of paragraph 1 item 4.6 of this technical regulation of the Customs Union in terms of protection against convective heat and radiant heat;

while burning residual materials used for the manufacture of personal protective equipment against thermal risks arc when exposed to the flame for 10 seconds should not exceed 2, charring length should not exceed 100 mm;

special protective clothing against thermal hazards of an electric arc should protect the user from second-degree burns when exposed to an electric arc to the intensity of incident heat flux density from 5 to 100 cal / cm (from 20.93 to 418.6 J / cm), specified in the documentation for product;

for making special protective clothing against thermal risks of an electric arc to be used to heat and fire resistant non-metallic fittings or fittings shall be closed layers of fire-resistant material;

special protective clothing materials against thermal hazards of an electric arc must be resistant to abrasion cloth not less than 4000 cycles, breaking load

of not less than 800 N, rending load of not less than 40 N, air permeability of at least 30 dm / m  $\cdot$  s;

breaking load seams products must be not less than 250 N;

fasteners used for making special protective clothing against thermal hazards of an electric arc, must be designed to prevent inadvertent opening after thermal exposure;

heat-resistant properties of special protective clothing against thermal hazards of an electric arc must be kept for the retention period specified by the manufacturer under the conditions provided by the manufacturer, without further action by the user;

2) manufacturer in the documentation for special protective clothing against thermal risks of electric arc must specify a limit value of the incident energy, which can lead to second-degree burn, the area and conditions of use (the destination), as well as requirements for the care of such special clothing;

3) in respect of personal protective face from electric arc thermal risks (protective shields facial)

protective shields should not have facial conductive protrusions, sight glasses facial protective shields must have a minimum thickness of 1.4 mm, and field of view of the sight glass in the frame along the central vertical line of the facial flap should be at least 150 mm;

screen panel shall be made of material which the burning rate must not exceed 1.25 mm / s;

protective face shield should provide protection for the face front and sides;

the outer side of the sight glass must be heat-resistant edging to prevent fire when arcing;

sight glass protective shield must be held at any position face shields, provide protection from ultraviolet radiation with a wavelength of 313 nm is not less, protection from infrared radiation - in accordance with subparagraph 11 of paragraph 4.6 of this technical regulation of the Customs Union and be resistant to a single shock with kinetic energy not less than 0.6 J, while the shock-resistant design - not less than 1.2 J, under the influence of high-speed particles protective shields must meet the requirements of subparagraph 19 of paragraph 4.3 of the technical regulations of the Customs Union;

4) manufacturer in the documentation for PPE person from thermal hazards of an electric arc must specify protective properties and conditions of use (the destination);

5) in respect of personal protective feet (shoes), complete with used clothing for protection against thermal hazards of an electric arc:

shoe sole must have an oil-and petrol-resistant properties and withstand the temperature not lower than +300 ° C for at least 60 seconds, the time is determined by the test methods;

the toe of the shoe should provide protection from bumps with energy not less than 5 J;

Shoes should not contain metal parts, all seams should be sewn with heat-resistant thread, as a heater in winter shoes not use fur or artificial fireproof insulation;

the material requirements for shoe soles, to the strength of fixing parts of footwear and its other parameters as specified in subparagraph 9 of paragraph 4.3 of the technical regulations of the Customs Union;

6) manufacturer in the documentation for PPE feet from thermal hazards of an electric arc must specify protective properties and conditions of use (the destination);

7) Underwear heat-resistant, heat-resistant and heat-resistant gloves balaclavas from thermal hazards of an electric arc should protect the user from second-degree burns, made of fire-resistant material with a heat-resistant properties, referred to in subparagraph 1 of paragraph 4.6 of this technical regulation of the Customs Union should not burn, melt and smolder after exposure to an open flame for 10 seconds, resistance to open flame should be maintained after 5 washings (dry cleaners);

8) manufacturer in the documentation to underwear undergarments heat-resistant, heat-resistant heat-resistant gloves and balaclavas from thermal hazards of an electric arc must specify protective properties and conditions of use (the destination);

9) in respect of special clothes and other personal protection against electric shocks, static electricity, electric and electromagnetic fields, as well as personal protection against static electricity:

special clothing and other personal protective equipment must have electrified less than 15 kV / m and protect the user from electrical shock and static electricity, electric or electromagnetic field intensity exceeding the maximum permissible levels;

attenuation intensity electrostatic, electric or electromagnetic fields in the frequency range should be at least 30;

clothing for protection against static electricity, electrical and electromagnetic fields must retain their protective properties for the duration of operation;

electrical resistance of the conductive parts of special clothes for protection from exposure to electric or magnetic fields must not exceed 10 ohms;

said special clothing should be made of cotton fabric lining, insulating body member of conductive fabric and metal parts;

Articles of the special clothing must be resistant to mechanical stress and breathability, referred to in subparagraph 1 of paragraph 4.7 of this technical regulation of the Customs Union;

fasteners used for making special clothes should ensure reliable electrical contact components of the garment and prevent inadvertent opening;

said special clothing should ensure the temperature of the inner layer is not more than +40 ° C for the time of its use under the conditions specified by the manufacturer;

for the manufacture of personal protective equipment from static electricity should be applied to the material surface resistivity less than 10 ohms or have the property of decreasing the charge;

screening PPE must provide protection against electric current flowing through the human body at the time of touching a disabled electric equipment under voltage induced electromagnetic or electrostatic means and having a value higher than 25 V;
screening PPE must protect human body from electric shock by shunting the current passing through the human body through the galvanic elements associated conductive special protective clothing, footwear and hand protection;

magnitude of the electric current flowing through the body of a man dressed in screening PPE shall not exceed the limit value for power frequency - 6 mA;

electrical resistance shielding clothing assembly, part of the shunt PPE shall not exceed 10 ohms resistance of hand protection - no more than 30 ohms;

hand protection, shoes and clothes that are part of the protective PPE must be insulated from the conductive body elements electrical resistance between

the conductive element of personal protection against static electricity and the ground should be between 10 to 10 ohms;

electrical resistance between the chassis side and glide shoe soles should be between 10 to 10 ohms; resistance between a man dressed in a set of PPE to protect against static electricity, and the ground shall not be less than 10 ohms;

antielectrostatic rings and bracelets should provide an electrical resistance in the people - the land from 10 to 10 ohms;

personal protection against static electricity should preclude the occurrence of sparks from static electricity energy exceeding 40 percent of the minimum ignition energy of the environment, or to the magnitude of the charge pulse of greater than 40 percent flammable charge per pulse values for the environment;

10) manufacturer in the documentation of special clothing and other personal protective equipment against electrical shock, static electricity, electric and electromagnetic fields, as well as personal protection against static electricity must indicate the limit values of the incident electrostatic, electric, magnetic or electromagnetic fields which provide compliance with the established maximum permissible levels of exposure to the user, the field attenuation coefficient in the frequency range, area and conditions of use (the destination) and the requirements for the care of such special clothing;

11) regarding use of personal protective eyewear (goggles) and face (facial protective shields) from exposure to electromagnetic fields:

requirements for optical performance data of personal protective equipment are set out in paragraphs 17 and 19 of section 4.3 of the technical regulations of the Customs Union;

personal eye and face protection must protect the eyes or face the front and sides;

specified personal protective equipment must have a minimum field of view along the central vertical line of at least 150 mm; glass (glass) should be colorless, provide protection from electromagnetic fields and be resistant to the impact of the kinetic energy of not less than 1.2 J;

12) manufacturer in the documentation for personal protective equipment for eyes and face from exposure to electromagnetic fields shall indicate the intensity of the electromagnetic field, which provides protection from and the conditions under which this protection is achieved;

13) With respect to the dielectric PPE against electrical current (dielectric gloves, boots and galoshes dielectric)

dielectric personal protection from exposure to electric current must be made of dielectric materials, preserving the protective properties under the conditions of use for the product, intended by the manufacturer;

dielectric personal protection from exposure to electric current must be watertight and be resistant to external mechanical and chemical factors, as well as moisture and retain their protective properties in the operation;

maximum leakage current of dielectric PPE must not exceed 9 mA;

Shoes must have an insulating pad of cotton cloth;

electrical resistance of the dielectric protective clothing must be at least 4 ohms, dielectric boots and galoshes - not less than 2 ohms, dielectric boots - at least 4 ohms for dielectric gloves leakage current at a given voltage must not exceed 9 mA;

dielectric personal protection from exposure to electric current must be checked at the intervals prescribed regulations on electrical safety, which is also indicated by the manufacturer in the product documentation;

14) manufacturer in the documentation to dielectric PPE against electrical current must specify the purpose and conditions of use (the destination), as well as the expiry date, date of last inspection and the next article.

4.8. In terms of clothing special signal increased visibility:

1) special clothing high visibility warning should be produced with the use of fluorescent and reflective materials, having an area of the set of signal elements of fluorescent material is not less than 0.14 m, a retro reflective material - not less than 0.10 m and the composite material - not less than 0, 20 m;

coefficient of retro reflection for retro reflective materials at an observation angle of 12 'and an illumination angle of 5 ° shall be not less than 250 cd /

 $(lux \cdot m)$  materials for class 1, not less than 330 cd /  $(lux \cdot m)$  for the materials in class 2 and not less than 65 cd /  $(lux \cdot m)$  for composite materials;

color characteristics of the background and combined materials should be in the range of chromaticity coordinates:

for yellow fluorescent (0,387, 0,610-0,356, 0,494-0,398, 0,452-0,460, 0,540);

for fluorescent orange (0.610; 0,390-0,535, 0,375-0,570, 0,340-0,655, 0,344);

for red fluorescence (0.655; 0,344-0,570, 0,340-0,595, 0,314-0,690, 0,310).

Background luminance factor and the combined material shall not be less than:

for yellow fluorescent - 0.76;

for fluorescent orange - 0.40;

for red fluorescence - 0.25.

When the signal elements in the form of strips, they must be a minimum width of 50 mm, and their location shall provide a visual indication of the human body;

clothing materials special signal must maintain high visibility reflective properties within the established manufacturer of its life;

2) manufacturer in the documentation to clothing special signal shall indicate increased visibility assignment, protection and clothing protection class of retro reflective material.

4.9. Complete personal protective equipment must meet the following requirements:

1) The manufacturer shall comply with the requirements for each component of complex PPE provided by the present technical regulation of the Customs Union, and to each of PPE separately to its composition;

2) attachable components to complex PPE should not reduce the safety and performance of the other components. Features PPE when sharing should be specified by the manufacturer in the product documentation to bringing the necessary safety performance;

3) change the ergonomic properties of complex PPE depending on their configuration, the manufacturer shall specify in the documentation to the product of the above indicators;

4) The connection of the components of complex PPE must ensure the safe operation of the product for the duration of the protective effect of its components;

5) construction sites compound (attachment) of the components of complex PPE should not allow attaching these components in any other way, except for the way prescribed by the manufacturer;

6) manufacturer in the documentation to complex PPE in addition to the information provided in subparagraphs 2) and 3) of this paragraph shall specify the protective properties and conditions of use (the destination).

4.10. Marking of PPE (except PPE dermatological) must meet the following requirements:

1) Each item of personal protective equipment, including interchangeable components, shall be marked. Marking is applied directly to the product and its packaging.

If it is impossible to apply the marking on the product, it is applied to the hard-to-label attached to the product. In the absence of labeling in its entirety directly to the product, is allowed not to apply the marking information on the piece, with the proviso that the information marked on the individual product packaging and attached to the article difficult to remove the label.

For earplugs and eye PPE marking allowed only on the individual package. On PPE or rescue from falling from a height and RPD with insulating or filtering face piece is allowed only on the marking of individual packaging, and in its absence - on multipacks subject to labeling of all components;

2) marking to be applied directly on the product or on stubborn label attached to the product, must contain:

product name (if available - model name, code, type);

manufacturer's name and (or) its trademark (if any);

protective properties;

size (if any);

designation of the technical regulations of the Customs Union, which must comply with the requirements of personal protection equipment;

single sign of products on the market states - members of the Customs Union;

date (month and year) of manufacture or expiry date, if it is installed;

class information protection and climate zone, determined in accordance with Table 3 of the N 3 of the technical regulations of the Customs Union and which can be used personal protective equipment (if necessary);

information about how to care and disposal requirements PPE;

information about the document, according to which made personal protection;

other information in accordance with the manufacturer's documentation;

3) Information should be applied by any method relief (including stamping, screen printing, engraving, casting, stamping) or hard-to-paint directly on the product or on the stubborn label attached to the product. Be permitted to apply the information in the form of icons, which can be used as indicators of danger, or the application of personal protective equipment. Information should be easily readable, bar storage, transportation, sale and use of products intended for the shelf-life, life and (or) warranty period of storage;

4) marking applied to the product packaging must contain:

product name (if available - model name, code, type);

name of the country of manufacture;

name, address and trademark (if any) of the manufacturer;

designation of the technical regulations of the Customs Union, which must comply with the requirements of personal protection equipment;

size (if any);

protective properties of the product;

how to care for the product (if necessary);

date of manufacture, and (or) the expiry date, if installed;

retention period for the PPE, losing their protective properties during storage;

single sign of products on the market states - members of the Customs Union;

magnitude of dangerous or harmful factor limiting the use of personal protective equipment (if available);

restrictions on use due to age, health status and other physiological characteristics of users;

class information protection and climate zone, determined in accordance with Table 3 of the N 3 of this technical regulation of the Customs Union, and which can be used personal protective equipment (if necessary);

information about the document, according to which made personal protection;

other information in accordance with the manufacturer's documentation.

4.11. Marking and maintenance performed on the official documents and state (s) language (s) of the state (in) - member (s) of the Customs Union, except for the name of the manufacturer and product names and other text included in a registered trademark. Simultaneous use of multiple languages - members of the Customs Union. Additional use of foreign languages is permitted provided full identity with the text content.

4.12. Marking of PPE shall be legible, easy to read and applied to the surface of products (labels, packaging), available for inspection without removing the packing, disassembly or tools.

4.13. Instructions on use of personal protective equipment are included in the operational documentation for personal protective equipment and shall include:

1) the scope;

2) restrictions on the use of personal protective equipment by factors of influence, as well as by age and state of health of users (if any);

3) the procedure for the use of personal protective equipment (PPE for complex designs);

4) requirements for qualification of the user, the procedure for admission to the use of personal protective equipment (if available);

5) type of personal protective equipment in accordance with <u>Annex 1</u> to this technical regulation of the Customs Union;

6) the name of personal protective equipment;

7) safety performance and operational features of personal protective equipment in accordance with the information requirements for the purchaser (user) and the conditions under which these figures are achieved;

8) information about safe use of personal protective equipment;

9) the procedure for maintenance and periodic inspections of personal protective equipment (if necessary);

10) information on the amount of personal protective equipment in the units of measurement used in the states - members of the Customs Union (if any);

11) the terms, conditions and terms of personal protective equipment;

12) requirements for the safe transportation of personal protective equipment (if any such claims);

13) for disposal of personal protective equipment (if any such claims);

14) a single sign of products on the market states - members of the Customs Union;

15) The designation of the technical regulations of the Customs Union, which must comply with the requirements of personal protection equipment;

16) the name of the country of manufacture and the manufacturer's name, legal address;

17) information about the document, according to which made personal protection;

18) date of manufacture and / or shelf life or expiration date, if they are established, are allowed to specify the retention period with the obligatory indication of place of application and method of determining the date of manufacture or expiry date;

19) the retention period for personal protective equipment, losing their protective properties during storage;

20) the manufacturer's warranty if use of the product.

4.14. PPE dermatological must meet the following requirements:

1) Personal protective dermatological, put into circulation in the common customs territory of the Customs Union, for its intended use must not harm human health and life, and have directed effectiveness against specific harmful production factors;

2) Safety PPE dermatological provided set of requirements for the composition, microbiological, level of toxic elements, toxicological, clinical and laboratory safety, consumer packaging and consumer information (buyers and users);

3) as ingredients PPE dermatological not use silicones, mineral abrasives, flammable, volatile organic solvents in an amount of more than 10 percent for each substance, as well as substances prohibited for use as ingredients in perfumes and cosmetics;

4) as ingredients PPE dermatological allowed to use dyes and salt dyes, preservatives, UV filters and other substances permitted for use as ingredients in perfumes and cosmetics;

5) Personal protective dermatological with antibacterial effect must have an antibacterial (antimicrobial) activity against Gram-negative bacteria and Gram-positive bacteria - infectious agents (sanitary indicative species - Escherichia coli, Staphylococcus aureus);

6) PPE with dermatological antifungal effect must possess antifungal (fungicidal) activity against pathogens - dermatophyte-T, Candida and other pathogenic fungi-dermatophytes (sanitary indicative form - Candida albicans);

7) Personal protective dermatological from frost (creams for the hands and face from frostbite) must be resistant to low temperatures and withstand at least three freeze-thaw cycles (-20  $^{\circ}$  C to +20  $^{\circ}$  C) must not delaminate and change their organoleptic and physico-chemical properties. These funds from frost cannot form a film on the skin and prevent normal gas exchange, the minimum application temperature shall be indicated in the labeling;

8) The total number of mesophilic aerobic and facultative anaerobic bacteria in 1 g or 1 cm PPE dermatological not exceeds 1000 cfu;

9) the amount of yeast, yeast and molds in 1 g or 1 cm PPE dermatological should not exceed 100 colony forming units;

10) enterobacteria pathogenic staphylococci and should not be determined in 1 g or 1 cm to produce;

11) Pseudomonas aeruginosa in personal protective equipment should be no dermatological;

12) into the personal protection of dermatological allowed arsenic not more than 5 mg / kg Lead - less than 5 mg / kg Mercury and - less than 1 mg / kg;

13) PPE should not have dermatological skin-resorptive, irritating and sensitizing effect;

14) use of personal protective dermatological regenerating, restore and clean type in conditions of radioactive substances and ionizing radiation is not allowed.

4.15. Marking PPE dermatological must meet the following requirements:

1) marking PPE dermatological applied directly to the consumer packaging products, and (or) product packaging, and (or) label, and (or) label method adopted for specific PPE, and must contain:

name and designation of funds is not allowed in the name indicate that it is the product of another well-known type of products;

manufacturer's name and location, name of the country and (or) place of origin of the product, as well as the name and location of the applicant (if the latter is not the manufacturer);

net weight, the nominal volume, quantity; batch code assigned by the manufacturer;

list of ingredients;

expiration date (date of manufacture);

single sign of products on the market states - members of the Customs Union;

designation of the technical regulations of the Customs Union, which must comply with the requirements of personal protection dermatology;

information on the proper use and storage, as well as warnings;

2) the list of ingredients of dermatological PPE must meet the following requirements:

list of ingredients in dermatological PPE must precede the word "Ingredients" or "Composition";

ingredients PPE dermatological specified in the list, or in accordance with the International Nomenclature of Cosmetic Ingredients (INCI) using the Latin alphabet, or in the state (s) language (s) of the State - a member of the Customs Union;

ingredients PPE dermatological specified in the list according to the recipe in order of decreasing mass fraction. Perfume (aromatic) indicate the composition as a single ingredient;

ingredients PPE dermatological, mass fraction is less than 1 percent, are listed in any order after those ingredients, the mass fraction of more than 1 percent;

dyes listed in any order after the other ingredients in accordance with the color index or received symbols;

3) to indicate the expiration date of personal protective equipment should be used dermatological formulation "Gaudin (use) to (month and year)" or the phrase "... Shelf life (months, years). Date of manufacture (month, year)." Shelf life for a specific brand of personal protective equipment specified by the manufacturer of dermatological;

4) information, except for a list of ingredients PPE dermatological, should be listed in Russian and, if necessary, in the state (s) language (s) of the state (in) - member (s) of the Customs Union. Allowed the manufacturer's name, product name and location of the foreign manufacturer's specified using the Latin alphabet. Information, except for the name PPE dermatological, manufacturer's name and its location contained in the marking PPE dermatological foreign manufacturers should be translated into Russian and, if necessary, into the official language of the state - a member of the Customs Union, and is presented in form accessible to the consumer.

### 5. Conformity

5.1. Match PPE this technical regulation of the Customs Union it is ensured by the safety requirements directly as well as through the use of standards included in the list of standards as a result of which, on a voluntary basis, compliance with these technical regulations of the Customs Union.

5.2. Research methods (tests) and measurements of PPE are set in the standardization documents included in the list of documents in the field of standardization, containing rules and methods of researches (tests) and measurements, including the rules of sampling required for the application and enforcement of the requirements of this technical regulations of the Customs Union and the implementation of assessment (confirmation) of compliance products.

5.3. Before release into circulation on the market of - members of the Customs Union PPE covered by these technical regulations should be subject to conformity assessment procedures set out there in safety requirements.

5.4. Demonstration of compliance with PPE requirements of this technical regulation of the Customs Union of the following forms:

1) declaration of conformity;

2) certification.

5.5. In choosing the form of conformity PPE are classified according to the risk of harm to the user:

1) First class - PPE of simple design, used in conditions with minimal risk of harm to the user, which are subject to declaration of conformity;

2) The second class - PPE of complex design to protect from death or from any hazards that may cause irreversible harm to the user, which are subject to mandatory certification.

5.6. Personal protective equipment, depending on the degree of risk of harm to the user (class) is subject to conformity assessment according to the form provided in <u>Appendix N 4</u> to this technical regulation of the Customs Union.

5.7. Declaration of conformity of PPE is performed through the declaration on the basis of his own evidence or evidence obtained from a third party - an accredited testing laboratory (center) included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union, in accordance with typical schemes duly approved.

5.8. When declaring the conformity of the applicant as registered may act in accordance with the laws of the State - a member of the Customs Union on its territory a legal entity or natural person as an individual entrepreneur, is a manufacturer or seller or performing the functions of the foreign manufacturer under a contract with the manufacturer to ensure compliance of the supplied PPE requirements of this technical regulation of the Customs Union and in part responsible for the discrepancy supplied PPE requirements of this technical regulation (person performing the functions of the foreign manufacturer).

5.9. In accordance with the standard declaration of compliance schemes approved by the Commission of the Customs Union:

- For mass-produced PPE simple design for a declaration of compliance which do not require the participation of a third party, 1D scheme applies;

- For parties and individual samples PPE simple design for a declaration of compliance which do not require the participation of a third party, 2D scheme applies;

- For mass-produced PPE when declaring conformity which requires the participation of a third party scheme applies 3D;

- For parties and individual samples of PPE for the declaration of conformity which requires the participation of a third party scheme is applied 4D.

Declaration of compliance schemes used for different types of personal protective equipment is listed in <u>Appendix N 4</u> to this technical regulation of the Customs Union.

5.10. When declaring the applicant to compliance forms the evidentiary materials, which should contain:

1) copies of registration documents of the applicant including:

full and abbreviated, including corporate (if available), name of the legal entity, its legal form;

postal address of the location of the organization;

information on setting the state registration;

taxpayer identification number;

information on the document confirming the fact of the organization on the tax registration (date, number, date of issue);

2) the name, specifications, description of personal protective equipment, operational documents on it;

3) a list of interstate, national (state) standards state - a member of the Customs Union, applied in full or in part, and included in the lists annexed to this technical regulation of the Customs Union documents in the field of standardization, ensuring compliance with the requirements of the technical regulations of the Customs Union and the need to undertake assessments (confirmation) of compliance and, if not applied these standards in whole or in part, descriptions of the solutions adopted to meet the requirements of the technical regulations of the Customs Union, which corresponds to personal protection, other information in accordance with the manufacturer's technical documentation and identify their characteristics in accordance with paragraph 1.4 Section 1 and Section 4 of this technical regulation of the Customs Union, the declared quantity (mass production, batch or unit of production), product code Classifier states - members of the Customs Union code or imported products in accordance with the Single Commodity Nomenclature for Foreign Economic Activity of the Customs Union;

4) protocols (tests) and measurements of samples for compliance with PPE requirements of this technical regulation of the Customs Union, obtained with an accredited testing laboratory (center), if they are required in accordance with the scheme declaration.

Manufactured (person authorized by the manufacturer) shall take all necessary measures to manufacturing process was stable and ensures compliance of manufactured PPE requirements of this technical regulation of the Customs Union. Manufactured (person authorized by the manufacturer) ensure production control (for circuit's conformity declaration 1D and 3D). In order to monitor compliance with PPE requirements of this technical regulation of the Customs Union, the applicant is testing samples of personal protective equipment in the testing laboratory (center) (declaration of compliance schemes for 3D and 4D).

5.11. As additional evidentiary materials the applicant shall be free to use:

1), the test samples of PPE in compliance with national standards, international standards, international standards, standards organizations, technical specifications;

2) certificate (s) voluntary certification system for compliance with national standards, international and interstate standards, standards organizations, codes of practice and voluntary certification systems (including product quality), as well as conditions of contracts.

5.12. Protocols (tests) and measurements of samples of PPE to verify compliance in the form of declaration, together with the name of personal protective equipment should include:

1) a general description and the importance of PPE in accordance with paragraph 1.6 <u>of section 1</u> and paragraphs 4.2-4.8 <u>of Section 4</u> of this technical regulation of the Customs Union, either directly or with links to it;

2) the results of researches (tests) and measurements of samples PPE obtained with the assistance of an accredited testing laboratory (center), in confirming compliance with these technical regulations of the Customs Union.

5.13. Declaration of Conformity issued by a single form approved by the Commission Decision of the Customs Union. The declaration of conformity shall be registered in accordance with the procedure established by the Commission of the Customs Union.

Applicant after registration of the declaration of conformity PPE requirements of this technical regulation of the Customs Union marks PPE in respect of which a declaration of conformity, a single sign of products on the market states - members of the Customs Union and take measures to ensure the production and sale of such funds personal protection of their compliance with this technical regulation of the Customs Union.

Validity of the declaration of conformity for the mass-produced personal protective equipment is 5 years for parties and individual samples of PPE - before the sale (or expiry date) or the last sample of the declared products from the declared party, but not more than 1 year.

The declaration of conformity and the members of the evidentiary materials shall be retained by the applicant within 10 years from the end of the declaration of conformity from the removal of products from the production or sale of the last product of the declared party PPE.

5.14. Certification of PPE provided an accredited certification body, included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union.

Mandatory certification is carried out by a certification body on the basis of an agreement with the applicant, which can act as registered in accordance with the laws of the State - a member of the Customs Union on its territory a legal entity or natural person as an individual entrepreneur, is a manufacturer or seller or performing the functions of the foreign manufacturer to under a contract with the manufacturer to ensure that the parts supplied PPE requirements of this technical regulation of the Customs Union and in part responsible for the discrepancy supplied PPE requirements of this technical regulation (person performing the functions of the foreign manufacturer).

Mandatory certification of personal protective equipment is conducted in accordance with the UN certification schemes approved by the decision of the Commission of the Customs Union:

- PPE for mass-produced, the quality of which depends on the safety performance scheme applies 1C;

- For parties PPE scheme applies 3C;
- PPE for individual products (samples) scheme is applied 4C;
- When the system is production (introduction of a series) PPE scheme applies 5C;

- When the system is production (introduction to the series), the PPE manufacturer which claims management system certification, the scheme applies 6C.

Certification schemes used for different types of personal protective equipment are listed in Appendix to this technical regulation of the Customs Union.

5.15. Certification body PPE:

1) draws on a contractual basis for research accredited certification bodies that are included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union;

2) carry out an annual inspection control of certified personal protective equipment in accordance with the certification scheme and the contract with the applicant;

3) carries out sampling of products;

4) analyzes the state of production (for circuits 1C and 5C) or management system certification (certification scheme for 6C), as well as oversees the stability management system functioning;

5) provides information about the certificates of conformity issued by the Unified register of issued certificates of conformity and registered declarations of conformity issued by a single form;

6) inform referred to in paragraphs 5.21 and 5.22 of this section of the technical regulations of the Customs Union, the state control (supervision) for personal protection, received the certification, but did not pass it;

7) issue certificates of compliance, suspend or terminate the conformity certificate issued by, send information about them to the authorized body of the state - a member of the Customs Union;

8) provides information to applicants on the procedure for compulsory certification;

9) draws up a contract with the applicant to carry out works on certification;

10) decide on the confirmation of the certificate of conformity for the results of the inspection control of certified personal protective equipment.

5.16. The applicant may apply to the application for certification at any accredited certification body PPE included in the Unified Register of certification bodies and testing laboratories (centers) of the Customs Union.

Manufactured (person authorized by the manufacturer) shall take all necessary measures to manufacturing process was stable and ensures compliance of manufactured PPE requirements of this technical regulation of the Customs Union (certification schemes for 1C and 5C), and shall take all necessary measures to ensure the stability of the management system and operating conditions for the manufacture of personal protective equipment conforming to these technical regulations of the Customs Union (Certification Scheme for 6C).

5.17. When certifying the applicant submits to the certification body application and a set of documentation in Russian and (if necessary) the language (s) of the state (in) - member (s) of the Customs Union, which includes:

1) copies of registration documents of the applicant including:

full and abbreviated, including corporate (if available), name of the legal entity, its legal form;

postal address of the location of the organization;

information on setting the state registration;

taxpayer identification number;

information on the document confirming the fact of the organization on the tax registration (date, number, date of issue);

2) the name, specifications, description of personal protective equipment, operational documents on it;

3) information on personal protective equipment and identifying their characteristics in accordance with paragraph 1.4 <u>of section 1</u> and <u>section 4</u> of this technical regulation of the Customs Union, the declared quantity (mass production, batch or unit of production), product code in accordance with the Single commodity nomenclature of foreign economic activity of Customs Union, as well as information about the manufacturer of the product;

4) information on storage conditions, operation, maintenance, repair, maintenance, transportation and disposal of personal protective equipment;

5) performance characteristics, including use limitations;

6) information about the items (components) and the replacement of personal protective products;

7) information about the classes of protection;

8) the shelf life of PPE and (or) its components;

9) information about the type of personal protective packaging;

10) the value of any description applied to personal protection labeling;

11) for the circuit 6C further provided with a copy management system certificates issued by the certification of management systems, confirming compliance management system and applies to the design and (or) production claimed for certification of personal protective equipment.

5.18. Certification body PPE considering a request submitted by the applicant and documentation and in a period not exceeding five working days of receipt of the application for review, decide on the application.

Accredited testing laboratory (center) conducts research (tests) and measurements of samples of personal protective equipment, prepare minutes of their researches (tests) and measurements and present it to the certification body PPE.

Copies of the documents on the basis of which the certificate of conformity issued PPE requirements hereof Customs Union and copies of certificates must be stored in compliance with the certification body that issued the certificate, during the validity of this certificate and at least 5 years after its expiration.

Copies (including electronic) protocols (tests) and measurements to be stored in a test not less than 10 years from the date of their registration.

5.19. Validity of the certificate of conformity issued by the scheme 3C and 4C, is not more than 1 year; validity of the certificate of conformity issued by certification schemes 5C and 6C is 3 years; validity of the certificate of conformity issued by the certification scheme 1C is 5 years.

5.20. The common customs territory of the Customs Union should be stored on a set of documents:

personal protection - the manufacturer (person authorized by the manufacturer) for at least 10 years from the date of withdrawal (termination) from the production of the PPE;

Party PPE - importer (supplier) for at least 10 years from the date of implementation of the latest products from the party.

Set of documents proving compliance should be granted bodies of state control (supervision) in their requirements.

5.21. State control (supervision) over compliance of PPE requirements hereof shall be in accordance with the legislation of the State - a member of the Customs Union.

5.22. Manufacturers, sellers, persons performing functions of the foreign manufacturer, products certification bodies and testing laboratories (centers) who violate the provisions of this technical regulation of the Customs Union shall be liable in accordance with the laws of the State - a member of the Customs Union in whose territory the offense has been committed.

#### 6. Marking a single sign of products on the market states - members of the Customs Union

6.1. PPE appropriate safety requirements and conformity assessment procedures the past in accordance with Article 5 of this technical regulation of the Customs Union shall be marked with a single sign of products on the market states - members of the Customs Union.

6.2. Marking a single sign of products on the market states - members of the Customs Union is carried out before the release of personal protective equipment in circulation in the market.

6.3. Single sign of products on the market states - members of the Customs Union be displayed on the personal protection equipment or hard-to-label and packaging, as well as contained in the appended operational documentation.

Single sign of products on the market states - members of the Customs Union, applied in any manner, providing crisp and clear images during the lifetime of personal protective equipment. For PPE, consisting of several parts, a single sign of products on the market states - members of the Customs Union is applied to all the parts that can be used separately, and components of personal protective equipment. When marking a single sign of products on the market of the - members of the Customs Union PPE undergone procedure of declaration of conformity under its graphical representation can be applied to the registration number of the declaration of conformity, and for PPE passed the certification procedure - certificate of conformity number and registration number of body Certification The certification.

6.4. May be applied as a single mark of products on the market states - members of the Customs Union only on the packaging and instruction in annexed operational documents, if it cannot be applied directly to personal protection.

6.5. PPE labeled single sign of products on the market states - members of the Customs Union, which is evidence that this product complies with the safety requirements of the technical regulations of the Customs Union, all the technical regulations of the Customs Union, the action of which they are subject, which provide for the affixing of the mark of products on the market states - members of the Customs Union.

### 7. Safeguard clause

7.1. Upon detection of PPE is not relevant requirements of this technical regulation of the Customs Union, or be evaluated (confirmation) and entering or put in circulation without a document assessment (confirmation) for compliance with this technical regulations of the Customs Union and (or) without marking a single mark of products on the market states - members of the Customs Union, empowered state authorities - a member of the Customs Union are required to take measures to prevent these products in circulation, to withdraw it from circulation in accordance with the laws of the State - a member of the Customs Union, as well as to inform the other States - members of the Customs Union.

7.2. The competent authorities of the State - the Customs Union member authorized to exercise oversight functions in the relevant field of activity required to notify the Commission of the Customs Union and the competent authorities of other countries - members of the Customs Union agreement reached in accordance with clause 7.1 of the decision specifying the reasons for this decision, and the provision of evidence explaining the need for the measure.

# Appendix N 1. Types of personal protective equipment, which are subject to this technical regulation of the Customs Union

Appendix N 1 to the technical regulations of the Customs Union "On the security means of individual protection " (TR TC 019/2011)

1) personal protection against mechanical impacts:

special protective clothing against mechanical impact and general industrial pollution;

hand protection against mechanical impact;

special clothing from possible capture by moving parts of machines;

hand protection from vibration;

PPE feet (shoes) from vibration;

PPE feet (shoes) from bumps, cuts and puncture wounds;

PPE feet (shoes) from slipping;

PPE head (protective helmets and protective caps);

personal eye protection (goggles);

PPE face (facial protective shields);

PPE against falls from a height and rescue devices from height (MIS);

PPE organ of hearing;

2) personal protective equipment and chemical factors:

costumes isolation from chemical factors (including used for defense against biological agents);

personal respiratory protective insulation (including breathing apparatus, personal protective respiratory chemical oxygen, personal respiratory protection, compressed air, personal respiratory protection with compressed oxygen, including non-autonomous (hose) RPD);

personal respiratory protection filter (including Particle PPE respiratory half mask with filter, Particle personal respiratory protection insulating face piece, anti-gas (combined) of PPE breathing with insulating face piece, filter self-rescuers);

special protective clothing, including protective clothing filtering of chemical factors;

personal eye protection (goggles) of chemical factors;

hand protection against chemical factors; PPE feet (shoes) from chemical factors; 3) personal protective equipment radiation factors (external ionizing radiation and radioactive substances): insulating suits to protect the skin and respiratory system from radioactive substances; personal respiratory protection (including filter) of radioactive substances; special protective clothing against radioactive substances and ionizing radiation; Boots for radioactive substances and ionizing radiation; hand protection from radioactive substances and ionizing radiation: personal eye and face protection against ionizing radiation; 4) personal protective equipment against high and (or) low temperatures: special protective clothing and hand protection from convective heat, radiant heat; special protective clothing and hand protection against sparks and spatter; special protective clothing and hand protection from exposure to low temperature; PPE feet (shoes) from elevated and (or) low temperatures, contact with a heated surface, thermal radiation, sparks and spatter; PPE head against low temperatures, high temperatures and thermal radiation; personal eye protection (goggles) and face (facial protective shields) from molten metal splashes and hot particles; 5) personal protective equipment against thermal risks arc non-ionizing radiation, electric shock, as well as from static electricity: special protective clothing and hand protection from thermal hazards of an electric arc; PPE person from thermal hazards of an electric arc (protective shields facial); PPE feet (shoes) from the thermal hazards of an electric arc;

Underwear heat resistant and heat-resistant balaclavas from thermal hazards of an electric arc;

special clothing and other personal protection against electric shock, static electricity, electric and electromagnetic fields, including personal protective shielding and personal protection from exposure to static electricity;

personal eye protection (goggles) and face (facial protective shields) from exposure to electromagnetic fields;

dielectric personal protection from exposure to electric current;

6) wear special signal increased visibility;

7) integrated personal protection;

8) PPE dermatological.

# Appendix N 2. Classification of personal protective equipment (components PPE) to the destination depending on the protective properties

Appendix N 2 to the technical regulations of the Customs Union "On the security means of individual protection " (TR TC 019/2011)

Protection Group		Subgroup protection	
1.	Against mechanical impacts		
1.1.	Against mechanical impacts	Abrasion	
		from punctures, cuts	
		Vibration	
		Noise	

[		
		in strokes from different parts of the body
		from possible capture moving parts
		falls from a height and rescue devices from height (ISU)
1.2.	From general industrial pollution	
1.3.	From water and nontoxic solutions	solutions of surfactants
		Waterproof
		water-resistant
1.4.	Nontoxic dust	Dust fiberglass, asbestos
		of explosive dust
		of fine dust
		from coarse dust
1.5.	From sliding on surfaces	fats and oils contaminated icy
2.		Of chemical factors
2.1.	From toxic substances	toxic substances from solid
		of liquid toxic substances
		from gaseous toxic substances
		aerosols from toxic substances
2.2.	From acid	Subgroups of different concentrations of anti-
2.3.	Alkali	Subgroups of different concentrations of anti-
2.4.	Of organic solvents, including lacquers and	of organic solvents from the aromatics from non-aromatic compounds from chlorinated
	paints based on them	hydrocarbons
2.5.	Oil, petroleum products, oils and fats	from crude oil products from the light fraction of petroleum oil products and heavy fractions
		of vegetable and animal oils and fats
		from solid oil
3.		By biological factors
3.1.	From harmful biological factors	microorganisms of insects and arachnids
4.		Of radiation factors
4.1.	From radioactive contamination and ionizing radiation	from radioactive contamination from ionizing radiation
5.	From hig	h (low) temperatures, sparks and molten metal splashes
5.1.	High temperature	climate caused by thermal radiation
		from open flames
		from sparks, spatter and molten metal splashes, scale

		from contact with the hot surfaces in excess of 45 ° C.
		from contact with the heated surfaces of 40 to 100 ° C.
		from contact with the heated surfaces of 100 to 400 $^{\circ}$ C.
		from contact with heated surfaces above 400 ° C.
		by convective heat
5.2.	Low temperature	against cold air from the lower air temperatures and wind
		to -20 ° C.
		to -30 ° C.
		to -40 ° C.
		to -50 ° C.
		from contact with the cooled surface
6.	From thermal hazards	of an electric arc, non-ionizing radiation, electric shock, static electricity
6.1.	From thermal hazards of an electric arc	
6.2.	From electric shock	from electric voltage up to 1000 V
		electrocution Above 1000 V
6.3.	From electrostatic charges and fields	
6.4.	From the electric and magnetic fields	electric fields
		Electromagnetic fields
7.		Wear a special signal increased visibility
7.1.	Wear a special signal increased visibility	
8.		Complete PPE – Personal Protection Equipment
8.1.	Complete PPE	Determined depending on the purpose of their constituent PPE
9.		PPE dermatological
9.1.	PPE dermatological	Protective equipment hydrophilic, hydrophobic, the combined action
		The protection against the effects of low temperatures, high temperatures, wind
		The protection against ultraviolet radiation ranges A, B, C
		Protective equipment against biological factors:
		- Insects - microorganisms
		Cleansers
		Regenerating, reducing agents

### Appendix N 3.

Appendix N 3 to the technical regulations of the Customs Union "On the security means of individual protection " (TR TC 019/2011)

# Table 1. Acceptable migration and the maximum allowable concentration of chemicals released from components (materials) PPE

Table 1

Identification of substance Product	To be controlled	Permissible amount of migration in the aqueous medium model mg / 1	Maximum permissible concentration in the air model environment, mg / m
]	. Polymeric materials and p	lastics on the basis of their	
1. Polyethylene (LDPE, HDPE), polypropylene, copolymers of	formaldehyde	0.1	0,003
ethylene propylene, polybutylene, polyisobutylene,	acetaldehyde	0.2	0.01
composite materials based on polyolefins	ethyl acetate	0.1	0.1
	hexane	0.1	-
	heptane	0.1	-
	hexene	-	0,085
	heptene	-	0,065
	acetone, alcohols	0.1	0.35
	methyl	0.2	0.5
	propyl	0.1	0.3
	isopropyl	0.1	0.6
	butyl	0.5	0.1

	isobutyl	0.5	0.1
2. Polystyrene plastics:			
polystyrene (block, suspension,	styrene	0.01	0,002
shockproof)	alcohols:		
	methyl	0.2	0.5
	butyl	0.5	0.1
	formaldehyde	0.1	0,003
	benzene	0.01	0.1
	toluene	0.5	0.6
	ethylbenzene	0.01	0.02
styrene-acrylonitrile	styrene	0.01	0,002
	acrylonitrile	0.02	0.03
	formaldehyde	0.1	0,003
	benzaldehyde	0,003	0.04
ABS plastics	styrene	0.01	0,002
	acrylonitrile	0.02	0.03
	alpha-methylstyrene	0.1	0.04
	benzene	0.01	0.1
	toluene	0.5	0.6
	ethylbenzene	0.01	0.02
	benzaldehyde	0,003	0.04
	Xylene (mixture of isomers)	0.05	0.2
styrene-methyl methacrylate copolymer	styrene	0.01	0,002
	methyl methacrylate	0.25	0.01
	methyl alcohol	0.2	0.5
	formaldehyde	0.1	0,003
a copolymer of styrene with methyl	styrene	0.01	0,002
methacrylate and			
acrylonitrile	methyl methacrylate	0.25	0.01
	acrylonitrile	0.02	0.03
	methyl alcohol	0.2	0.5
	formaldehyde	0.1	0,003
styrene-alpha-methylstyrene	styrene	0.01	0,002

	alpha-methylstyrene	0.1	0.04
	benzaldehyde	0,003	0.04
	acetophenone	0.1	0,003
styrene-butadiene	styrene	0.01	0,002
	butadiene	0.05	1
	acetaldehyde	0.2	0.01
	acetone	0.1	0.35
	alcohols:		
	methyl	0.2	0.5
	butyl	0.5	0.1
	Xylene (mixture of isomers)	0.05	0.2
foamed polystyrene	styrene	0.01	0,002
	benzene	0.01	0.1
	toluene	0.5	0.6
	ethylbenzene	0.01	0.02
	cumene (isopropyl benzene)	0.1	0,014
	methyl alcohol	0.2	0.5
	formaldehyde	0.1	0,003
3. Polyvinyl chloride plastics (PVC):			
Rigid PVC	vinyl chloride	0.01 or 1.0 mg / kg (1 ppm) of	0.01
	-	the finished product	
	acetaldehyde	0.2	0.01
	acetone	0.1	0.3
	alcohols:		
	methyl	0.2	0.5
	propyl	0.1	0.3
	isopropyl	0.1	0.6
	butyl	0.5	0.1
	isobutyl	0.5	0.1
	benzene	0.01	0.1
	toluene	0.5	0.6
	Zinc (Zn)	1	-
	tin (Sn)	2	-

Plasticized	dioctyl	0.2	0.1	
PVC, in addition to				
indicators specified for rigid PVC, should	didodetsilftalat	0.2	0.1	
determine	diizododetsil-	0.2	0.1	
	phthalate			
4. Polymers based on vinyl acetate and	vinyl acetate	0.2	0.15	
derivatives:	formaldehyde	0.1	0,003	
	acetaldehyde	0.2	0.01	
polyvinyl acetate, polyvinyl alcohol,	hexane	0.1	-	
copolymer dispersion of vinyl acetate	heptane	0.1	-	
dibutyl maleate				
5. Polyacrylates	hexane	0.1	-	
	heptane	0.1	-	
	acrylonitrile	0.02	0.03	
	methyl acrylate	0.02	0.01	
	methyl methacrylate	0.25	0.01	
	butyl	0.01	0.0075	
6. Polyorganosiloxanes (silicones)	formaldehyde	0.1	0,003	
	acetaldehyde	0.2	0.01	
	phenol	0.05	0,003	
	alcohols:			
	methyl	0.2	0.5	
	butyl	0.5	0.1	
	benzene	0.01	0.1	
7. Polyamides:				
Polyamide 6 (polycaproamide, nylon)	E-kaprolaktam	0.5	0.06	
j	benzene	0.01	0.1	
	phenol	0.05	0,003	
polyamide 66	hexamethylene	0.01	0,001	
(Poligeksametilendipamid, nylon)	diamine			
	methyl alcohol	0.2	0.5	
	benzene	0.01	0.1	
polyamide 610 (polyhexamethylene	hexamethylene-	0.01	0,001	

	diamine		
sebatsinamid)			
	methyl alcohol	0.2	0.5
	benzene	0.01	0.1
8. Polyurethanes	ethylene glycol	1	1
	acetaldehyde	0.2	0.01
	formaldehyde	0.1	0,003
	ethyl acetate	0.1	0.1
	butyl	0.1	0.1
	acetone	0.1	0.35
	alcohols:		
	methyl	0.2	0.5
	propyl	0.1	0.3
	isopropyl	0.1	0.6
	benzene	0.01	0.1
	toluene	0.5	0.6
9. Polyesters:			
polyethylene	formaldehyde	0.1	0,003
	acetaldehyde	0.2	0.01
polypropylene	methyl	0.1	0.07
	acetone	0.1	0.35
	formaldehyde	0.1	0,003
	acetaldehyde	0.2	0.01
politetrametilenoksid	propyl alcohol	0.1	0.3
	acetaldehyde	0.2	0.01
	formaldehyde	0.1	0,003
PPO	phenol	0.05	0,003
	formaldehyde	0.1	0,003
	methyl alcohol	0.2	0.5
polyethylene and copolymers based on	acetaldehyde	0.2	0.01
terephthalic acid	ethylene glycol	1	1
	dimethyl	1.5	0.01
	formaldehyde	0.1	0,003

	alcohols:			
· · · · · · · · · · · · · · · · · · ·	methyl	0.2	0.5	
	butyl	0.5	0.1	
	isobutyl	0.5	0.1	
	acetone	0.1	0,350	
polycarbonate	phenol	0.05	0,003	
	Diphenylolpropane	0.01	0.04	
	methylene chloride	0.02	-	
	(Dichloromethane)			
	chlorobenzene	0.02	0.1	
polysulfone	Diphenylolpropane	0.01	0.04	
	benzene	0.01	0.1	
	phenol	0.05	0,003	
polyphenylene sulfide	phenol	0.05	0,003	
······································	acetaldehyde	0.2	0.01	
	methyl alcohol	0.2	0.5	
	dichlorobenzene	0,002	0.03	
	boron (B)	0.5	-	
when used as a binder:				
phenol-formaldehyde resins	phenol	0.05	0,003	
	formaldehyde	0.1	0,003	
silicone resin	formaldehyde	0.1	0,003	
	acetaldehyde	0.2	0.01	
	phenol	0.05	0,003	
	alcohols:			
	methyl	0.2	0.5	
	butyl	0.5	0.1	
	benzene	0.01	0.1	
epoxy resins	epichlorohydrin	0.1	0.2	
	phenol	0.05	0,003	
	Diphenylolpropane	0.01	0.04	
	formaldehyde	0.1	0,003	
10. Fluoroplastics: Teflon-3	fluoro - ion (total)	0.5	-	
· ·				

Teflon-4, Teflon	formaldehyde	0.1	0,003
	hexane	0.1	-
	heptane	0.1	-
11. Plastics based on phenolic	formaldehyde	0.1	0,003
resins (phenolics)	acetaldehyde	0.2	0.01
	phenol	0.05	0,003
12. Polyformaldehyde	formaldehyde	0.1	0,003
	acetaldehyde	0.2	0.01
13. Aminos (mass extruded urea-formaldehyde and melamine formaldehyde)	formaldehyde	0.1	0,003
14. Polymeric materials based on epoxy resins	epichlorohydrin	0.1	0.2
	phenol	0.05	0,003
	Diphenylolpropane	0.01	0.04
	formaldehyde	0.1	0,003
15. Ionomeric resin Surlyn including	formaldehyde	0.1	0,003
	acetaldehyde	0.2	0.01
	acetone	0.1	0.35
	methyl alcohol	0.2	0.5
	Zinc (Zn)	1	-
16. Cellulose	ethyl acetate	0.1	0.1
	formaldehyde	0.1	0,003
	benzene	0.01	0.1
	acetone	0.1	0.35
17.Cellulose Ether plastic (etroly)	ethyl acetate	0.1	0.1
	acetaldehyde	0.2	0.01
	formaldehyde	0.1	0,003
	cpirty:		
	methyl	0.2	0.5
	isobutyl	0.5	0.1
	acetone	0.1	0.35
18. Collagen (biopolymer)	formaldehyde	0.1	0,003
	acetaldehyde	0.2	0.01
	ethyl acetate	0.1	0.1

	butyl	0.1	0.1
	acetone	0.1	0.35
	alcohols:		
	methyl	0.2	0.5
	propyl	0.1	0.3
	isopropyl	0.1	0.6
	butyl	0.5	0.1
	isobutyl	0.5	0.1
	II. Rubber components and	rubber materials	<u>.</u>
19. Nitrile	acrylonitrile	0.02	0,007
synthetic rubbers	acid		
20. Styrene and butadiene	styrene	0.01	0,002
synthetic rubbers	phenol	0.05	0,003
	formaldehyde	0.1	0,003
	ethylbenzene	0.01	0.02
	acetaldehyde	0.2	0.01
21. Chloroprene synthetic rubbers	chloroprene	-	0,002
22. Polyurethane	toluilendii-	-	0,002
synthetic rubbers	zotsianat		
23. Of all the rubbers and latexes	thiuram D	0.5	0.02
	thiuram E	0.5	0.03
	tsimat	0.6	-
	etiltsimat	0.05	-
	Captax	0.4	0,012
	altaks	0.4	0.03
	dibutyl phthalate	0.2	0.1
	Zinc ions	1.0	-
	butadiene	-	1.0
III	. Fabric materials (the fibers wi	thin the tissue structure)	
24. Natural Fiber	the total on pesticides:		
	pentachlorophenol	0.05	-
	formaldehyde	0.1	0,003

25. Artificial fibers (viscose, acetate)	carbon bisulfide	1	0,005
	acetaldehyde	0.2	0.01
26. Chemical fiber (polyester fiber -	ethylene glycol	1	1
polyethylene, polyester)			
	dimethyl-	1.5	0.05
	terephthalate		
27. Polyamide (PA, nylon, nylon)	caprolactam	0.5	0.06
	hexamethylene	0.01	0,001
	diamine		
28. Polyacrylonitrile fiber (PAN nitrone)	acrylonitrile	0.02	0.03
	vinyl acetate	0.2	0.15
29. Polyvinyl chloride fiber (PVC, chlorine)	benzene	0.01	0.1
	toluene	0.5	0.6
	dioctyl	2	0.02
	dibutyl phthalate	0.2	-
	vinyl chloride	0.01	
30. Polyvinyl alcohol fiber (PVA Vinola)	vinyl acetate	0.2	0.15
31. Polyolefin fibers (polypropylene,	formaldehyde	0.1	0,003
polyethylene)	acetaldehyde	0.2	0.01
32. Polyurethane fibers (spandex)	ethylene glycol	1	1
	acetaldehyde	0.2	0.01
	IV. Dyes		
33. Dyes	based on	not	not
	benzidine	allowed	allowed
	arsenic (As)	0.05	0,003
	Lead (Pb)	0.03	0.0003
	cadmium (Cd)	0,001	0.0003
	chromium (Cr)	0.1	0.0015
	Cobalt (Co)	0.1	0,001
	Copper (Cu)	1	0,001
	Nickel (Ni)	0.1	0,001
	mercury (Hg)	0.0005	0.0003

## Table 2. Basic requirements for personal protective equipment and safety indicators

Table 2

Ν	Name of product	Sanitary and epidemiological requirements		Notes
p /	(Item)	index	permissible levels	
р				
1.	PPE materials	Health indicators		
		Odorimeter (odor sample materials products)	no more than 2 points	
		Sanitary-chemical indicators of the aqueous extracts		
		Odor	no more than 2 points	
		Chromaticity	not more than 20 (a) Scale	
		Turbidity	no more than 2 points	
		pH	within 6-9 units. pH	
		Changing the pH	1 unit. pH	
		Oxidability	not more than 5 mg O / L.	
		Bromiruemost *	not more than 0.3 mgVr /1	
		UV absorption in the wavelength range	no more than 0.3 units. OP	
		220-360 nm	not more than 1.0 ml 0.02 N	
		Reducing impurities	r-ra Na S O	
		Migration of harmful substances in distilled water (based	DCM (mg / liter, no more than	MPC acetal
		on the composition of materials)	indicated in Table 1)	aldehyde set for the
				case of drinking
				water
		Migration of harmful substances into the air (on the basis	MPC in air (mg / m ) max shown in Table 1	Norm for
		of material composition)		formal dehydrogenation
				indicated without
				background
				contamination ambient air

			present	
	·	Toxicological and health indicators		
		Irritant effect on the skin (in animal experiments)	Lack irritant - 0 points	
		Irritant to the mucous membranes (in animal	Lack irritant - 0 points	
		experiments) - only for products intended for contact		
		with the skin and mucous membranes of human		
		Skin-resorptive action - only for products intended for	No action	
		contact with the skin and mucous membranes of human		
		Sensitizing effect (in animal experiments) - only for	Lack of sensitization - 0 points	
		products intended for contact with the skin and mucous	70-120%	
		membranes of human toxicity index		
		Electrified materials(electrostatic field)		
		product classes):		
	~ .	~	not more than 15 kV / m	
2	Personal	Sanitary and chemical-toxicological indicators according		
	respiratory	to claim 1 (depending on the material composition)		
	protection suits			
	insulating	Magaproduction	in accordance with regulatory and	
		Mass production	tachnical documentation for spacific	
			products	
3	Clothing signal	All indicators on section 1 in addition: Evaluation of	products	
5	using fluorescent	fluorescent dyes in order to avoid the use of radioactive		
	and reflective	substances		
	materials			
4	Clothing for	All indicators on section 1, in addition:		
•	protection from	Thermal insulation properties of the products as a whole		
	exposure to low	and of individual items was assessed by		
	temperatures and	physiological-hygienic studies involving testers in		
	radiant heat (warm	climatic chambers.		
	suits, shoes,			
	gloves,			
	gloves, hats,	The magnitude of thermal insulation in real conditions of		

underwear, sleeping bags and other personal protective equipment)       use for climatic regions (zones) ***, m · ° C / W, not less:	[	1				T
other personal protective equipment)       etc.       etc.         protective equipment)       protective work wear sets X (cold):       - IA (custom)       0,513         - IB (IV)       0.681       - - II (III)       0,442         - II (III)       0,360       - - II (III)       0,360         PPE head (hats)       - - II (III)       0,397         - II (III)       0,329       - - II (III)       0,329         - II (III)       0,329       - - II (III)       0,329         - II (III)       0,329       - - II (III)       0,437         - II (III)       0,332       - - II (III)       0,433         - II (III)       0,437       - - II (III)       0,433         - II (III)       0,437       - - II (III)       0,437         - II (III)       0,437		underwear, sleeping bags and	use for climatic regions (zones) ***, m $\cdot \circ C / W$ , not less:			
equipment)       protective work wear sets X (cold):       - IA (custom)       0,513         - IB (IV)       0,681         - III (III)       0,442         - III (III)       0,442         - III (III)       0,360         PPE head (hats)       - IA (custom)       0,397         - III (III)       0,3427         - III (III)       0,447         - III (III)       0,329         - III (III)       0,329         - III (III)       0,437         - III (III)       0,437         - IB (IV)       0,437         - IB (IV)       0,572         - III (III)       0,422         - III (III)       0,437         - IB (IV)       0,551         - III (III)       0,437         - III (III)       0,432         - III (III)       0,432         - III (III)       0,433         - III (III)       0,437         - III (III)       0,433         - III (III)       0,403         - III (III)       0,403 </td <td></td> <td>other personal</td> <td>1055.</td> <td></td> <td></td> <td></td>		other personal	1055.			
equipment)       protective work wear sets X (cold):       - IA (custom)       0.513         - IB (IV)       0.681       - III (III)       0.442         - III (III)       0.360       - III (III)       0.377         - IB (IV)       0.447       - III (III)       0.329         - IB (IV)       0.447       - III (III)       0.329         - IB (IV)       0.447       - III (III)       0.329         - III (III)       0.329       - III (III)       0.295         - PPE feet (shoes):       - IA (custom)       0.437         - III (III)       0.432       - III (III)       0.432         - III (III)       0.422       - III (III)       0.432         - III (III)       0.447       - III (III)       0.437         - III (III)       0.432       - III (III)       0.332         - III (III)       0.437       - III (III)       0.332         - III (III)       0.332       - III (III)       0.332         - III (III)       0.447		protective				
Image: Protective work wear sets X (cold):         - IA (custom)         0,513           Image: PPE head (hats)         - II (III)         0,681           PPE head (hats)         - II (III)         0,397           Image: PPE head (hats)         - IA (custom)         0,397           Image: PPE head (hats)         - IA (custom)         0,397           Image: PPE head (hats)         - IA (custom)         0,397           Image: PPE head (hats)         - II (III)         0,295           Image: PPE feet (shoes):         - II (Custom)         0,437           Image: PPE feet (shoes):         - II (III)         0,437           Image: PPE feet (shoes):         - III (III)         0,497 <td></td> <td>equipment)</td> <td></td> <td></td> <td>0 510</td> <td></td>		equipment)			0 510	
- IB (IV)       0,681         - III (II)       0,442         - III (II)       0,360         - PPE head (hats)       IA (custom)         - IB (IV)       0,447         - IB (IV)       0,447         - IB (IV)       0,447         - III (II)       0,339         - III (III)       0,332         - III (III)       0,332         - III (III)       0,437         - III (III)       0,422         - III (III)       0,422         - III (III)       0,447         - III (III)       0,423         - III (III)       0,447         - III (III)       0,433         - III (III)       0,437         - III (III)       0,377			protective work wear sets X (cold):	- IA (custom)	0,513	
				- IB (IV)	0,681	
PPE head (hats)     -III (II)     0,360       PPE head (hats)     -IA (custom)     0,397       -IB (IV)     0,447       -III (III)     0,295       PPE feet (shoes):     -IA (custom)     0,437       -III (III)     0,295       PPE feet (shoes):     -IA (custom)     0,437       -III (III)     0,295       PPE feet (shoes):     -IA (custom)     0,437       -III (III)     0,322       -III (III)     0,332       -III (III)     0,432       -III (III)     0,437       -III (III)     0,437       -III (III)     0,432       -III (III)     0,433       -III (III)     0,403       -III (III)				- II (III)	0,442	
PPE head (hats)       - IA (custom)       0,397         - IB (IV)       0,447         - II (III)       0,329         - II (III)       0,295         PPE feet (shoes):       - IA (custom)       0,437         - II (III)       0,432         - II (III)       0,437         - II (III)       0,433         - II (III)       0,433         - II (III)       0,332         - II (III)       0,403         - II (III)       0,377         - IB (IV)       0,551         - II (III)       0,377         - II (III)       0,377         - II (III)       0,403         - II (III)       0,403         - II (III)       0,377         - Heart rate - Moisture loss - He				- III (II)	0,360	
- IA (custom)       0,397         - IB (IV)       0,447         - II (III)       0,329         - II (III)       0,295         - II (III)       0,295         - II (III)       0,437         - IB (IV)       0,437         - IB (IV)       0,572         - III (III)       0,432         - III (III)       0,432         - III (III)       0,422         - III (III)       0,423         - III (III)       0,497         - III (III)       0,497         - III (III)       0,403         - III (III)       0,403         - III (III)       0,403         - III (III)       0,403         - III (III)       0,377         - III (III)       0,377         - III (III)       0,377         - The skin temperature (average and local) - Body temperature - average body temperature - moisture loss - Heat - level			PPE head (hats)			
- IB (IV)       0,447         - II (III)       0,329         - III (III)       0,295         - III (III)       0,437         - III (III)       0,437         - IB (IV)       0,572         - III (III)       0,437         - III (III)       0,437         - III (III)       0,437         - III (III)       0,422         - III (III)       0,422         - III (III)       0,437         - III (III)       0,447         - III (III)       0,422         - III (III)       0,332         - III (III)       0,437         - III (III)       0,332         - III (III)       0,437         - III (III)       0,437         - III (III)       0,332         - III (III)       0,437         - III (III)       0,437         - III (III)       0,377         - III (III)       0,377         - III (III)       0,377         - The skin temperature (average and local) - Body temperature - average body temperature - Moisture loss - Heat - level energy <td></td> <td></td> <td></td> <td>- IA (custom)</td> <td>0,397</td> <td></td>				- IA (custom)	0,397	
- II (III)       0.329         PPE feet (shoes):       - III (II)       0.295         - III (II)       0.437         - IA (custom)       0.437         - IB (IV)       0.572         - III (III)       0.422         - III (III)       0.422         - III (III)       0.422         - III (III)       0.422         - III (III)       0.332         - Hand PPE (gloves, etc.):       - IA (custom)       0.497         - III (III)       0.332         - Hand PPE (gloves, etc.):       - IA (custom)       0.497         - III (III)       0.403         - III (III)       0.377         - The skin temperature (average and local) - Body temperature - average body temperature - Moisture loss - Heat - level energy         Mass of products for which the permissible values set (shoes, insulating PPE kits, etc.)       in accordance with the legal and technical documentation for specific products         4 *       Clothing for protection a				- IB (IV)	0,447	
Image: space of the products for which the permissible values set (shoes, insulating PPE kits, etc.)       - III (II)       0,295         Image: space of the products for which the permissible values set (shoes, insulating PPE kits, etc.)       - III (III)       0,437         Image: space of the products on spection 1, in addition (for shoes)       - III (II)       0,437				- II (III)	0,329	
Image: PPE feet (shoes):       - IA (custom)       0,437         Image: PPE feet (shoes):       - IB (IV)       0,572         Image: PPE feet (shoes):       - IB (IV)       0,572         Image: PPE feet (shoes):       - II (III)       0,422         Image: PPE feet (shoes):       - II (III)       0,422         Image: PPE feet (shoes):       - II (III)       0,332         Image: PPE feet (shoes):       - III (III)       0,332         Image: PPE feet (shoes):       - III (III)       0,337         Image: PPE feet (shoes):       - IB (IV)       0,551         Image: PPE feet (shoes):       - III (III)       0,403         Image: PPE feet (shoes):       - III (III)       0,403         Image: PPE feet (shoes):       - III (III)       0,377         Image: PPE feet (shoes):       - III (III)       0,403				- III (II)	0,295	
- IB (IV)       0,572         - II (III)       0,422         - III (II)       0,332         - Hand PPE (gloves, etc.):       - IA (custom)       0,497         - III (III)       0,551       -         - III (III)       0,403       -         - III (III)       0,377       -         - The skin temperature (average and local) - Body temperature - average body temperature - severage body temperature - severage body temperature - severage body temperature - severage body temperature - average body temperature - average body temperature - severage body temperature - Moisture loss - Heat - level energy         4 *       Clothing for products for which the permissible values set (shoes, insulating PPE kits, etc.)       in accordance with the legal and technical documentation for specific products         4 *       Clothing for protection against       All indicators			PPE feet (shoes):	- IA (custom)	0,437	
- II (III)       0,422         - III (II)       0,332         - III (II)       0,332         - III (II)       0,332         - III (II)       0,497         - IB (IV)       0,551         - II (III)       0,403         - III (III)       0,377         - III (III)       III (III)         - III (II				- IB (IV)	0,572	
Image: state of the state of the presence of the products of the product s of the product s as a whole       - III (II)       0,332         Image: state of the product s as a whole       - III (II)       0,332         Image: state of the product s as a whole       - III (II)       0,332         Image: state of the product s as a whole       - III (II)       0,347         Image: state of the product s as a whole       - III (III)       0,403         Image: state of the product s as a whole       - III (III)       0,377         Image: state of the product s as a whole       - III (III)       0,377         Image: state of the product as a whole       - III (III)       0,377         Image: state of the product as a whole       - III (III)       0,377				- II (III)	0,422	
4*       Clothing for protection against         4*       Clothing for protection against				- III (II)	0,332	
- IB (IV)       0,551         - II (III)       0,403         - III (III)       0,377         - The skin temperature (average and products in general, and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       - The skin temperature - average body temperature - average body temperature - enthalpy Change - Heart rate – Moisture loss - Heat - level energy         Mass of products for which the permissible values set (shoes, insulating PPE kits, etc.)       in accordance with the legal and technical documentation for specific products         4 *       Clothing for protection against       All indicators on section 1, in addition (for shoes)       All indicators on the products as a whole	•		Hand PPE (gloves, etc.):	- IA (custom)	0,497	
Image: Constraint of the products in general, and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       - II (III)       0,403         Image: Constraint of the basis of thermal performance assessment of the human condition:       - The skin temperature - average body temperature - average body temperature - enthalpy Change - Heart rate - Moisture loss - Heat - level energy         Image: Constraint of the products for which the permissible values set (shoes, insulating PPE kits, etc.)       in accordance with the legal and technical documentation for specific products         Image: Protection against       All indicators on section 1, in addition (for shoes)       - Thermal insulation properties of the products as a whole				- IB (IV)	0,551	
Image: Calculation of actual thermal insulation properties of products in general, and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       - III (II)       0,377         Image: Calculation of actual thermal insulation properties of products in general, and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       - The skin temperature (average and local) - Body temperature - average body temperature - enthalpy Change - Heart rate – Moisture loss - Heat - level energy         Image: Calculation of actual thermal performance assessment of the human condition:       Image: Imag				- II (III)	0,403	
Calculation of actual thermal insulation properties of products in general, and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       - The skin temperature (average and local) - Body temperature - average body temperature - enthalpy Change - Heart rate – Moisture loss - Heat - level energy         Mass of products for which the permissible values set (shoes, insulating PPE kits, etc.)       in accordance with the legal and technical documentation for specific products         4 *       Clothing for protection against       All indicators on section 1, in addition (for shoes)         Protection against       Thermal insulation properties of the products as a whole				- III (II)	0.377	
Image: Section 1 and individual subjects, conducted on the basis of thermal performance assessment of the human condition:       Iocal) - Body temperature - average body temperature - enthalpy Change - Heart rate - Moisture loss - Heat - level energy         Image: Mass of products for which the permissible values set (shoes, insulating PPE kits, etc.)       In accordance with the legal and technical documentation for specific products         Image: Product section 1 and the permissible values set (shoes, insulating PPE kits, etc.)       In addition (for shoes)         Image: Product section 1 and the permissible values as a whole       In addition properties of the products as a whole			Calculation of actual thermal insulation properties of	- The skin temperature (average	and	
Image: Section 1 against       Image: Section			products in general, and individual subjects, conducted	local) - Body temperature - average		
Image: Solution of the output of the period and of the period and of the period of			on the basis of thermal performance assessment of the	body temperature - enthalpy Change -		
Image: Contract of the products of the products as a whole       Image: Contract of the products of the products as a whole         Image: Contract of the products of the products as a whole       Image: Contract of the products as a whole			human condition:	Heart rate – Moisture loss - Heat - level		
4*     Clothing for protection against       elevated     Thermal insulation properties of the products as a whole				energy		
4*       Clothing for protection against       All indicators on section 1, in addition (for shoes)       in accordance with the legal and technical documentation for specific products						
4*     Clothing for protection against     All indicators on section 1, in addition (for shoes)			Mass of products for which the permissible values set	in accordance with the legal and	l	
4*     Clothing for protection against     All indicators on section 1, in addition (for shoes)			(shoes, insulating PPE kits, etc.)	technical documentation for spe	cific	
4*       Clothing for protection against       All indicators on section 1, in addition (for shoes)         elevated       Thermal insulation properties of the products as a whole				products	-	
protection against elevated Thermal insulation properties of the products as a whole	4 *	Clothing for	All indicators on section 1, in addition (for shoes)	· · · · · · · · · · · · · · · · · · ·		
alayated Thermal insulation properties of the products as a whole		protection against	······································			
		elevated	Thermal insulation properties of the products as a whole			
	temperatures	and of individual i	tems was assessed by			
---	--	---	---	--------------------------------------	---------------------	--
	(costumes, shoes,	physiological-hygi	enic studies involving test in climate			
	mittens, gloves,	chambers for them	nal criteria of the human condition (see			
	hats)	item 3), as well as indicators:			~	
	•	- The temperature	of the inner surfaces of clothing	not more than 40 °	<sup>2</sup> C.	
		- Air temperature i	n the space beneath	not more than 40 °	<sup>o</sup> C.	
		Strength of materia	als shoe soles contact heat (thermal			
		stability shoe), as i	measured by the results of			
		pnysiological-nygi	Characteristic characteristics after			
		special installation	. Characteristic changes soles after			
		contact with heate	d to $(300  2)$ °C for surface $(60  1)$			
		and a subsequent I	0-minute cool down - the appearance			
		of the test shoe sol	es (meiting, cracking, charring) and			
		Subjective feeling		huming consotion	in the color	
		- Subjective reening	gs of the skin in the soles	not more than 40 (		
		- The temperature Mass of products f	or which the permissible values set	in accordance with	u regulatory and	
		(shoes etc.)	or which the permissible values set	technical documentation for specific		
		(511005, 010.)		products	fution for specific	
5	Working and	All indicators on s	ection 1, in addition:	DCM		
C	special		<u></u> ,	2 0111		
	clothing and persona	l protection from	Specific hygienic characteristics of ma	terials: - migration	not more than 1.0	
	exposure to electrica	l and	of harmful substances into the water -	from copper	mg / 1	
	electromagnetic field	ls (jackets,	fabrics: copper		-	
	overalls, nakasniki, g	gloves, boots,				
	aprons, scarves, curt	ains)				
	gloves from the - Of other shielding materials control migratory		g materials control migratory	in accordance with	the MAC and AAC	
	effects of a	substances, based	on the composition of the tissue;	harmful substance	s in water;	
	constant magnetic					
	tield					
		- Migration of hari	nful substances into the air from the	in accordance with	the MAC and AAC	
		material (if approp	riate)	narmful substance	s in the air	
		Snielding propertie	es of materials and clothing in general to $(ED)$ is described for an energy of $50$ H $_{\odot}$	protect		
		against electric fields (EP) industrial frequency of 50 Hz (50 Hz EA)				

		and radio frequency electromagnetic fields (EMF RF), mea using the stands, and test dummies under physiological-hyg studies:	isured gienic
		- Levels EP 50 Hz EMF and RF affecting man dressed in	
		match:	
		Tensions EP 50 Hz: - EP tensions in the frequency	not more than $5  kW  / m$ of not more
		range of 10-30 kHz;	than 0.5 kW / m
		- EP tensions in the frequency range, MHz:	
		0,03-3,0 3,0-30,030,0-50,0 50,0-300,0	not more than 0.5 kV / m is not more
			than 0.03 kV / m is not more than 0.08
			kV / mis not more than 0.08 kW / m
		- Calculated shielding factor (Ke) or attenuation	regulatory requirements for products.
		materials and clothing must conform	
		Protective properties of materials, products from the	
		effects of a constant magnetic field (PMP)	
		- PMP levels acting locally on the human hand, as	PMP remote magnetic induction of 10
	N C	measured under the protective gloves should be within	mT
6	Means of	All indicators on <u>section 1</u> , in addition:	
	Jonizing Dediction	Encoific characteristics of conitary motorials, microtion	
		of harmful substances in water, mg / L, more	
		Specific hygienic characteristics of materials: - migration	
		of harmful substances in water	
		- Of lead-, tin tissue:	DCM
		- Lead;	not more than 0.03 mg / 1
		- Tin;	not more than 2.0 mg / 1
		- Of other x-ray materials, control of migratory	in accordance with the list of MAC and
		substances should be carried out on the basis of the composition of the tissue;	AAC harmful substances in water
		- Migration of harmful substances into the air from the	in accordance with the list of MAC and
		material (if appropriate)	AAC harmful substances in the air

7	Other protective	All indicators on section 1, in addition:		
	clothing and materials with special properties specified	Specific hygienic characteristics of materials:	Controlled by the migration of harmful substances from the composition of materials in accordance with the	
		- Migration of harmful substances in water, mg / L, more	MAC and AAC list of harmful substances in water	
		- Migration of harmful substances into the air, mg / m $$ , not more	in accordance with the list of MAC and AAC harmful substances in the air	
8	Absorbers, catalysts for personal respiratory protection, adsorbing box regenerative cartridges	Toxicological data established in animal experiments - toxicometry parameters, the degree of toxicity of the products (with a view to determining the security requirements in the manufacture and handling of the products)		
		Toxicometry indicators:		
		- Acute toxicity by inhalation	The absence of clinical signs of intoxication when spraying products and the absence of changes in functional status indicators animals after exposure.	If there are signs of exposure permitted only tight product placement.
		- Irritability skin (once, repeat)	0 points No signs of irritation.	- "-
		- Irritation of the product on the mucous membranes and upper respiratory tract by inhalation	0 points No signs of irritation.	- "-
		- Resorptive effect through the skin (once, repeat)	Absence	- "-
		- Sensitizing effects	0 points No evidence of sensitization	- "-
		The temperature of the materials in contact with the human body and is warmed by the body facing surface of human regenerative cartridges during operation (in case of exothermic reactions)	not more than 40 (o) C	

	Definition of controlled substances in workplace air and	- List of MAC and AAC harmful
	on the skin, their hygiene standards and prevention in the	substances in the air of the working
	production and use of products in accordance with the	area - MAC and AAC harmful
	following regulations (depending on application):	substances in the air

\* Indicator estimated if necessary, based on the material composition.

Depending on the length of continuous wear and frequency of use of the product on a point system is divided into:

- Regular use (every 4 hours or more) - 1 point;

- Occasional use (1-2 times per week - to 4 hours) - 2 points.

In accordance with hygienic classification on a point system for each product should be determined classifying index (KP), establishing a risk product's effects on the health of children and adults, according to the formula:



 $\sum B_{\text{max}}$  - The maximum possible amount of points assigned in accordance with the classification;

 $\Sigma B_{\min}$  - The minimum possible amount of points assigned in accordance with the classification. Products, depending on the value of classifying the indicator should be divided into four classes:

Class I - classifying index - 0,38-0,55;

Class II - classifying index - 0,56-0,70;

Class III - classifying index - 0,71-0,92;

Class IV - classifying index - 0,93-1,25

\*\*\* Climatic regions are accepted on the basis of climatic zoning Russia or similar regions of other countries (depending on latitude and local climatic conditions) in accordance with Table 3.

# Table 3. Climatic regions (zones)

Symbol	Region	Representative of the city
climate-		
Atlantic area		
(zone)		
IV (I)	Russian Federation Astrakhan region, Kalmykia, Rostov region, Stavropol region	Stavropol, Krasnodar, Novorossiysk,
(* -1.0 °;		Rostov-on-Don, Sochi, Astrakhan
2.7 m / s **)		
III (II)	Russian Federation: Bryansk, Vladimir region, Voronezh region, Ivanovo region,	Arkhangelsk, St. Petersburg, Moscow, Sarato
(-9.7 ° C *;	Kaluga region, Kursk, Leningrad region, Lipetsk region, the Republic of Mari El,	Murmansk, Novgorod, Tver, Smolensk,
5.6 m / s **)	Mordovia, Moscow region, Nizhny Novgorod region, Veliky Novgorod,	Tambov, Kazan, Volgograd, Samara.
	Orel. Belarus: Minsk region, Vitebsk, Mogilev, Grodno, Gomel region,	
	Brest region.	Minsk
	Republic of Kazakhstan: Aktobe, Atyrau, Almaty region, Zhambyl, Kyzylorda	Almaty.
	region Mangistau region, South Kazakhstan region	
II (III)	Russian Federation: Altai Republic, Amur Oblast, Republic of Bashkortostan	Novosibirsk, Omsk, Tomsk, Syktyvkar,
(-18.0 ° C; *	Republic of Buryatia, Vologda region, Irkutsk region (excluding the areas listed	Chelyabinsk, Chita, Tyumen, Tobolsk, Irkuts
3.6 m / s **)	below), the Republic of Karelia, Kemerovo region, Kirov region, Kostroma,	Khabarovsk, Perm, Orenburg.
	Krasnoyarsk Territory (excluding the areas listed below) Kurgan region,	
	Novosibirsk Oblast, Omsk Oblast, Orenburg Oblast, Perm Region, Sakhalin	
	region (except for the areas listed below) Sverdlovsk region, Tatarstan, Tomsk	
	region (except for the areas listed below) Tuva Republic, Tyumen region (except	
	for the areas listed below) Udmurt Republic, Khabarovsk territory (except for the	
	areas listed below) Chelyabinsk area the Chita area.	
	Republic of Kazakhstan: Akmola, East Kazakhstan oblast, West Kazakhstan,	Astana
	Karaganda region, Kostanay, Pavlodar, North Kazakhstan region.	
IB (IV)	Arkhangelsk region (except for areas located within the Arctic Circle), Irkutsk	Yakutsk, Oymyakon, Verkhoyansk Turuhans
(-41 ° C; *	region (regions: Bodaibinsky, Katanga, Cyrene, Mama Chu), Kamchatka Krai, the	Urengoy, Nadim, Salekhard, Magadan,
1.3 m/s **)	Republic of Karelia (north of 63 ° north latitude), Komi Republic (areas located to	Olekminsk
	the south of the Arctic Circle ), Krasnoyarsk Krai (territory Evensk Autonomous	
	Okrug and Turuhanskogo area located south of the Arctic Circle), Kuril Islands,	

	Magadan region (except for the areas listed below) Murmansk region, the	
	Republic of Sakha (Yakutia) (except Oymyakon district and districts located north	
	of the Arctic Circle ), Sakhalin Region (areas: Nogliksky, Okhtinsky), Tomsk	
	region (regions: Bakcharsky, Verhneketskiy,	
	Krivosheinsky, Molchanovsky, Parabelsky, Chainsky and territories and the	
	Alexander Kargasoksky districts located south of 60 ° north latitude), Tyumen	
	region (districts of Khanty-Mansi and Yamal-Nenets autonomous districts except	
	districts located north of 60 ° north latitude), Khabarovsk ( areas: Ayano-Maisky,	
	Nicholas, Okhotsk, im.Poliny Osipenko Tuguro-Chumikansky, Ulcha	
IA ("special")	Magadan region (regions: Omsukchan, Ola, North-Even, Srednekan, Susumansky,	Norilsk, Surgut, Tixi Dixon
(- 25 ° C *,	Tenkinsky, Khasynskiy, Yagodninsky), the Republic of Sakha (Yakutia)	
6,8 m / s **)	(Oymyakon district) area located north of the Arctic Circle (except the Murmansk	
	region), Tomsk region (territory the Alexander and Kargasoksky districts located	
	north of 60 ° north latitude), Tyumen region (districts of Khanty-Mansi and	
	Yamal-Nenets autonomous districts located north of 60 ° north latitude),	
	Chukotka Autonomous Okrug	

Note. \* - The average temperature winter months; \*\* - Average wind speed of the most probable values.

# Appendix N 4. Forms conformity of PPE

4 Appendix N to the technical regulations of the Customs Union "On the security means of individual protection " (TR TC 019/2011)

	Name PPE	Form confirmed	Risk class	Certification	Note
		tion Compliance		scheme or	
				declaration	
	I. Pe	rsonal protection agains	st mechanical im	pacts	
1.	Special protective clothing against mechanical	Declaration	first	1D, 2D	In accordance with the UN
	impacts, including from non-toxic dust and				declaration schemes
	general industrial pollution				
2.	Special clothing from possible capture moving	Declaration	first	1D, 2D	- "-
	parts				
3.	PPE feet (shoes) from shocks	- "-	- "-	3D, 4D	- "-
4.	PPE feet (shoes) from vibration	Declaration	first	3D, 4D	In accordance with the UN
					declaration schemes
5.	PPE feet (shoes) from punctures, cuts	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN
				6C	certification schemes
6.	PPE feet (shoes) from slipping	Declaration	first	1D, 2D	In accordance with the UN
					declaration schemes
7.	PPE head (protective helmets)	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN
				6C	certification schemes
8.	PPE from head strikes an immovable object	Declaration	first	3D, 4D	In accordance with the UN
	(helmets and protective lightweight caps)				declaration schemes
9.	Personal eye protection (goggles)	- "-	- "-	3D, 4D	- "-
10.	PPE organ of hearing	- "-	- "-	3D, 4D	- "-
11.	PPE face (facial protective shields)	- "-	- "-	3D, 4D	- ''-
12.	Personal protective equipment against falls from	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN

	a height, and a means of escape from a height (ISU)			6C	certification schemes				
13.	Hand protection against mechanical impacts	Declaration	first	3D, 4D	In accordance with the UN declaration schemes				
14.	Hand protection from vibration	Declaration	first	3D, 4D	- "-				
	II. Perso	nal protective equi	pment against che	emical agents					
15.	Costumes isolation from chemical factors (including used for defense against biological agents)	certification	second	1C, 3C, 4C, 5C, 6C	In accordance with the UN certification schemes				
16.	Personal respiratory protective insulating	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
17.	Personal respiratory protection filter	certification	second	1C, 3C, 4C, 5C, 6C	- "-				
18.	Special protective clothing, including protective clothing filtering of chemical factors	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
19.	Personal eye protection (goggles) of chemical factors	- "-	- "-	1C, 3C, 4C, 5C, 6C	- ''-				
20.	Hand protection from chemical factors	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
21.	PPE feet (shoes) of chemical factors	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
	III . Perso	III. Personal protective equipment against radiation factors							
22.	Insulating suits to protect the skin and respiratory system from radioactive substances	certification	second	1C, 3C, 4C, 5C, 6C	In accordance with the UN certification schemes				
23.	Personal respiratory protection (including filter) from radioactive substances	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
24.	special protective clothing against radioactive substances and ionizing radiation;	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
25.	Boots for radioactive substances and ionizing radiation;	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
26.	hand protection from radioactive substances and ionizing radiation;	- "-	- "-	1C, 3C, 4C, 5C, 6C	- "-				
27	personal eye and face protection against	- "-	- "-	1C, 3C, 4C, 5C,	- "-				

	ionizing radiation			6C	
	IV . Person	al protection against hi	gh and (or) low t	emperatures	
28.	Special protective clothing and hand protection from convective heat, radiant heat, sparks and molten metal splashes	certification	second	1C, 3C, 4C, 5C, 6C	In accordance with the UN certification schemes
29.	Special protective clothing and hand protection from the effects of low temperature	certification	second	1C, 3C, 4C, 5C, 6C	- "-
30.	PPE feet (shoes) from elevated and (or) low temperatures, contact with a heated surface, thermal radiation, sparks and molten metal splashes	certification	second	1C, 3C, 4C, 5C, 6C	- "-
31.	PPE head from high (low) temperature, thermal radiation	certification	second	1C, 3C, 4C, 5C, 6C	- "-
32.	Personal eye protection (goggles) and face (facial protective shields) from molten metal splashes and hot particles	certification	second	1C, 3C, 4C, 5C, 6C	- "-
	V . Personal protective equipment against screening	thermal hazards of an eng), as well as from the	electric arc, non- effects of static e	ionizing radiation, e lectricity	lectric shock (including
33.	Special protective clothing against thermal risks of an electric arc	certification	second	1C, 3C, 4C, 5C, 6C	In accordance with the UN certification schemes
34.	PPE person from thermal hazards of an electric arc (protective shields facial)	certification	second	1C, 3C, 4C, 5C, 6C	- "-
35.	PPE feet (shoes) from the thermal hazards of an electric arc	certification	second	1C, 3C, 4C, 5C, 6C	- "-
36.	Underwear heat-resistant, heat-resistant and heat-resistant gloves balaclavas from thermal hazards of an electric arc	certification	second	1C, 3C, 4C, 5C, 6C	- "-
37.	Special clothing and other personal protection against electric shock (including screening), static electricity, electric, electromagnetic fields	certification	second	1C, 3C, 4C, 5C, 6C	- "-
38.	Personal eye protection (goggles) and face (facial protective shields) from exposure to electromagnetic fields	Declaration	first	3D, 4D	In accordance with the UN declaration schemes

39.	Personal protective electricity	ve equipment against static	Declaration	first	3D, 4D	- "-	
40.	Dielectric person	al protection from exposure to	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN	
	electric current				6C	certification schemes	
		VI	[. Wear a special signal	increased visibi	lity		
41.	Wear a special sig	gnal increased visibility	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN	
					6C	certification schemes	
			VII. PPE derm	atological			
42.	PPE dermatologie	cal	certification	second	1C, 3C, 4C, 5C,	In accordance with the UN	
	-				6C	certification schemes	
			VII I . Comple	ete PPE			
43.	Complete PPE	integrated tools for individual	protection confirmed cor	npliance impleme	entation		
		in forms and schemes under- confirm compliance with their constituents.					
		Compatibility elements means individual					
		protection formally declared a					

## Appendix N 5.

### List PPE subject to mandatory conformity with the release into circulation on the territory of states members of the Customs Union

5 Appendix N to the technical regulations of the Customs Union "On the security means of individual protection " (TR TC 019/2011)

1. Individual protection against mechanical factors protective overalls from mechanical factors, including possible seizure of moving parts

Suits for men and women to protect against common industrial dirt and mechanical effects (including separate items: a jacket, trousers, bib) Suits for men and women to protect against non-toxic dust Coats, coats for men and women to protect against water Suits for men and women to protect against water Miner's suits to protect against mechanical and general industrial pollution Overalls for men and women to protect against non-toxic dust, mechanical and general industrial pollution Aprons

Bathrobes for men and women workers, and special purpose

#### Hand protection against mechanical factors

Mittens and gloves protective garments, other than for firefighters Knitted glove, except for children

#### Hand protection from vibration

Hand protection from vibration PPE feet from vibration Special footwear vibro-protective

#### PPE feet from bumps

Leather shoes and other materials for protection against mechanical impacts (impacts, punctures, cuts) Leather shoes for protection against common industrial dirt and mechanical effects

PPE feet from slipping

Shoes for protection against sliding, including zazhirennym surfaces

#### PPE head

Protective helmets and protective caps

Protective helmets for drivers and passengers of motorcycles and mopeds

#### Personal eye protection

Goggles PPE person Protective shields facial

Personal protective equipment against falls from a height

Safety belts, their parts and components

PPE organ of hearing

Hearing protectors and their components Earplugs (earplugs)

2. Personal protective equipment against chemical agents Costumes isolation from chemical factors (including used for defense against biological agents) Insulating suits, including a forced air Personal respiratory protective insulating type, including self-rescuers, other than for firefighters Personal respiratory protective chemical oxygen, insulating devices chemical oxygen (self-rescuers) Personal respiratory protection, compressed air (breathing apparatus) Personal respiratory protection with compressed oxygen (breathing apparatus) Front of the rubber for PPE, except for products for firefighters Personal respiratory protection filter type (including self-rescuers), interchangeable elements to them Particle PPE respiratory half mask with filter Particle personal respiratory protection insulating face piece Anti-gas personal respiratory protection insulating face piece Anti-gas (combined) personal respiratory protection insulating face piece Filtering self-rescuers Front of the rubber for PPE, except for products for firefighters Replacement filters (filter elements) for PPE Special protective clothing, including protective clothing filtering of chemical factors Clothing for limited protection from toxic substances Suits for men and women for protection against mechanical impacts, water and alkalis Suits for protection from oil and petroleum products Women's suits for protection against oil and petroleum products

Suits for protection against acids

Women's suits to protect against acids

Personal eye protection from chemical factors

Goggles

Hand protection from chemical factors

Gloves

Gloves chamber

PPE feet (shoes) of chemical factors

Leather shoes and other materials for the protection of oil, petroleum products, acids, alkalis, non-toxic and explosive dust

Formed rubber boots to protect against oil, oil and fats (except products for firefighters)

Special rubber molded boots to protect against water, petroleum oils and mechanical impacts (except products for firefighters)

3. Individual protection from radiation factors (external ionizing radiation and radioactive substances):

Insulating suits to protect the skin and respiratory system from radioactive substances

Personal respiratory protection (including filter) from radioactive substances

Special protective clothing against radioactive substances and ionizing radiation

Boots for radioactive substances and ionizing radiation

Hand protection from radioactive substances and ionizing radiation Personal eye and face protection against ionizing radiation

Personal respiratory protection filter type of radioactive substances Personal respiratory protection filter type of radioactive substances

4. Individual protection from high and (or) low temperature

Special protective clothing and hand protection from convective heat, radiant heat, sparks and molten metal splashes, except for products for firefighters

Suits for protection against high temperatures

Women's suits for protection against high temperatures

Suits for protection against sparks and molten metal splashes

Gloves and mittens for protection against high temperatures of different materials

Special protective clothing and hand protection from the effects of low temperature

Suits for protection against low temperatures (including separate items: a jacket, trousers, bib)

Overalls men to protect against cold

Women's suits for protection against low temperatures (including separate items: a jacket, trousers, bib)

Overalls for Women for low temperature protection

Gloves and mittens for protection against low temperatures of various materials

PPE feet (shoes) from high and (or) low temperature, thermal radiation, sparks and molten metal splashes

Leather shoes and other materials to protect against high temperatures, except footwear for firefighters

Leather shoes and other materials for protection against low temperatures

PPE from head high and (or) low-temperature thermal radiation

Protective helmets and protective caps

Personal protective equipment for eyes and face from splashes of molten metal and hot particles

Goggles

Protective shields facial

5. Individual protection against heat arc non-ionizing radiation, electric shock, as well as from the effects of static electricity

Special protective clothing against heat of an electric arc

Clothing for protection from heat effects of arcing

PPE face from the heat of electric arc

Protective shields facial

PPE feet (shoes) from thermal electric arc

Leather shoes for protection against high temperatures, except footwear for firefighters

Underwear heat resistant and heat-resistant balaclavas from thermal electric arc

Underwear from heat-resistant thermal electric arc

Temperature resistant from heat balaclavas electric arc

Special clothing and other personal protective equipment from static electricity, electric, magnetic and electromagnetic fields, including personal protective equipment from static electricity

Set individual shielding for protection against electric fields of industrial frequency

Personal protective equipment for eyes and face from exposure to electromagnetic fields

Goggles

Protective shields facial

Dielectric personal protection from exposure to electric current

Footwear special dielectric polymeric materials

Special rubber shoes dielectric

Aprons dielectric

Special insulating gloves

6. Wear a special signal increased visibility

Wear a special signal increased visibility

7. Complete PPE

Integrated personal protection established by codes within them PPE

8. Personal protective dermatological

Protective equipment:

hydrophilic, hydrophobic, the combined action

from frost, wind

Ultraviolet bands A, B, C

from exposure to biological agents: insects, microorganisms

Cleansers: creams, pastes, gels Regenerating, reducing agents - creams, emulsions 878 N, 09.12.11 CCC

*Text List of standards as a result of which, on a voluntary basis, compliance with* the technical regulations of the Customs Union "On the security of personal protective equipment" (*TR TC 019/2011*), see the link.

*Text list of documents in the field of standardization, containing rules and methods (tests) and measurements, including the rules of sampling required for the application and enforcement of the requirements of the technical regulations of the Customs Union "On the security of personal protective equipment" (TR TC 019/2011) and implementation of assessment (confirmation) of conformity of products, see the link.* 

Electronic text document prepared by JSC "Code" and consulted on: the official website of the Customs Union Commission www.tsouz.ru as at 29.12.2011