



Filtering self-rescuer ZEVS-U



The product is **CE 0403** marked.

Application

ZEVS-U, a filtering device with hood for escape from fire, is intended for protection of respiratory system, eyes, and head of adults and children over 12 years old from toxic combustion products including carbon monoxide, other hazardous chemical substances, and aerosols like smoke, dust and mist emitted in case of fire and other man-made emergencies.

ZEVS-U is a single use device used for self rescue of a person at evacuation during fires in hotels, residential and administrative buildings, hospitals, crowded buildings, and other similar facilities.

ZEVS-U corresponds to the Main Safety Requirements according to the Regulation 2016/425 (Annex II) and the requirements of EN 403:2004 «Respiratory protective devices for self-rescue – Filtering devices with hood for escape from fire - Requirements, testing, marking».

Composition

ZEVS-U includes a fireproof hood (1) with a visor (2), a half mask (3) with an exhalation valve (4) and a combined filter (5) connected with a hood. The hood is equipped with an adjustable head harness (6) and a neck seal (7). ZEVS-U is hermetically packed into a package (8). It is supplied in a bag for storage (9). There are explanatory pictures with operating rules on the bag.



Operation

The inhaled air contaminated by toxic combustion products is cleaned in a combined filter and comes into the respiratory organs of a user. The exhaled air through the exhalation valve is taken out into the atmosphere.

Application Conditions

ZEVS-U refers to a filter type protective equipment. It is used for protection against toxic substances when the content of oxygen in the ambient air is not less than 17% and ambient temperature is from 0° to +60°C. ZEVS-U maintains its protective properties even after exposure to temperature of +200°C for 1 minute and short-term influence of the open flame with temperature +800±50°C during 5 seconds.

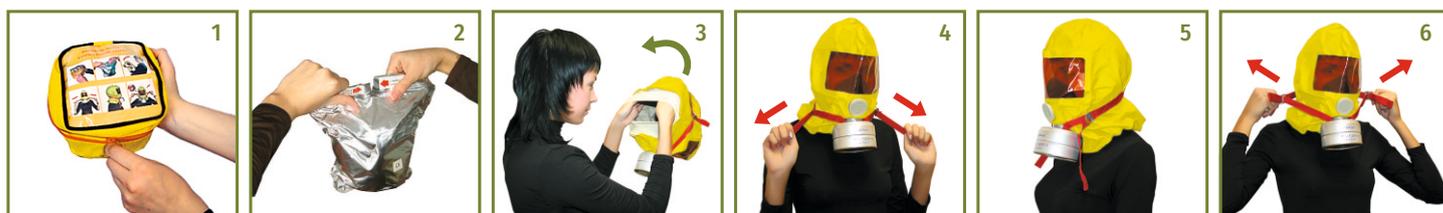
Advantages

- high level of effectiveness;
- protection against a wide range of hazardous substances;
- comfortable breathing and speech communication;
- one size for adults and children;
- convenient in operation;
- special preparation and training of a user isn't required.

Technical specifications of ZEVS-U

Parameter	Parameter according to EN 403:2004		Parameter according to TU 2568-523-05795731-2011
	allowed value	actual value by certification tests	
1. Breathing resistance of the filtering device for escape from fire at a flow rate of 95 dm ³ /min, not more: - inhalation - exhalation	8 mbar (800Pa) 3 mbar (300 Pa)	3,8 mbar (380Pa) 1,1 mbar (110Pa)	800 Pa 300 Pa
2. Penetration coefficient of the filter according to test-aerosol (sodium chloride) when volume flow rate is 95 dm ³ /min, %, not more	6	0,29	1,0 (according to standard oil mist)
3. Inward leakage according to test-substance (sulfur hexafluoride), %, not more: - breathing area	2,0	0,03	0,1 (according to standard oil mist)
4. Inward leakage according to test-aerosol (sodium chloride), %, not more: - visor zone	20,0	0,2	0,1 (according to standard oil mist)
5. Inflammability – ability of the filtering device for escape from fire to stand influence of the open flame with temperature (800±50) °C	The product after influence of the open flame doesn't continue to burn	The filtering device for escape from fire keeps working capacity after the flame influence during 5 seconds	The filtering device for escape from fire keeps working capacity after the flame influence during 5 seconds
6. Carbon dioxide concentration in inhaled air, %, not more than	2,0	0,55	2.0
7. Weight without bag, g, not more	1000	620	800
8. Breakthrough time of the filter under test-substances concentration, min, not less than			
- carbon monoxide, 2500 ml/m ³	15	> 15	-
- carbon monoxide, 5000 ml/m ³	15	> 15	30 (4375 mg/m ³)
- carbon monoxide, 7500 ml/m ³	15	> 15	-
- carbon monoxide, 10000 ml/m ³	15	> 15	-
- hydrogen cyanogen, 400 ml/m ³	15	> 25	30 (2000 mg/m ³)
- hydrogen chloride, 1000 ml/m ³	15	> 20	-
- acrolein, 100 ml/m ³	15	> 43	-
Parameter according to Russian state standard (GOST R 22.9.09-2005)			
- acetonitrile, 700 mg/m ³	20	> 30	-
- chloropicrin, 50 mg/m ³	20	> 30	-
- chlorine, 90 mg/m ³	20	> 30	-
- sulfur hydride, 700 mg/m ³	20	> 30	-
- sulfur dioxide, 700 mg/m ³	20	> 30	-
- hydrogen fluoride, 10 mg/m ³	20	> 30	-
- ammonia, 600 mg/m ³	20	> 30	-
- dimethylamine, 90 mg/m ³	20	> 30	-
- nitrogen dioxide, 40 mg/m ³	20	> 30	-
- chlorine cyanide, 50 mg/m ³	20	> 30	-
- phosgene, 50 mg/m ³	20	> 30	-
9. Warranty shelf life, year	-	-	5

How to Use



1. Study pictures and inscriptions on the bag. Open the bag. Take out a package with a device.
2. Tear a leakproof package on a cut, take the device. Throw out the bag and the package.
3. Unfold a hood, stretch an elastic neck seal, put on the hood and press a half mask to your face.

4. Tighten forward belts of head harness till a full touch of the half mask to the face.
5. Breathe quietly and quickly leave the dangerous zone.
6. In a safe zone weaken belts of the head harness by pulling back for pull-tabs of buckles.