



FLOWTRONIX (FT)



RESPIRATORY PROTECTION



Founded in 1990, **FLOWTRONIX (FT)** is a leading Manufacturer, Stockiest, Distributor and Supplier of the complete range of high quality Personal Protective Equipment (PPE) and safety solutions. We provide a diverse product portfolio for consolidated safety purchasing to our strategic end user clients, distribute products and services through our largest integrated network of resellers, retail stores and distribution centers.



Personal Protective Equipment (PPE)

FT offers a full range of safety solutions for your professional needs. We offer high quality personal protective equipments which guarantee protection against wide range of risks associated with high degree of comfort for our users. We supply our products to all industrial sectors that need protective equipment for their manpower against all kinds of occupational hazards. FT work towards by implementing a total "Head-to-Toe" safety concept to the HSE standards by providing authentic, environment friendly and quality Personal Protective Equipment.

FT SAFETY FIRST AT EVERY WORKPLACE

Serious injury or death in the workplace changes lives forever - for the families, friends, co-workers, employer and communities. That is why it is very important to apply Safety First philosophy in every workplace. Effective health and safety in your workplace can help keeping your employees happy and productive, at the same time reduces the human and business costs of injuries.

RESPIRATORY PROTECTION



QUALITY
INNOVATION
FUNCTIONALITY

In many working environments, respiratory protection is very significant. Workers are exposed anytime to several harmful contaminants and airborne toxins which can gravely affect one's health. Comprehensive and effective respiratory protections are vital to prevent health hazards.

AVES Respiratory Protection products has a wide variety of full face masks, half face masks, filter cartridges and disposable masks for every industrial requirement. The customer's needs and requirements can be met through the range of respiratory products available.

AVES products are tested and certified to standards such as EN 136:1998 European Standard, EN 149:2001, NIOSH, 42CFR84 and CE testing. Each product undergoes keen inspection and quality control to ensure that every item is in compliance with the standards for customers' safety and satisfaction.





BESPOKE-INNOVATIVE SOLUTIONS

EXTENSIVE PRODUCT DEVELOPMENT

MEETS INTERNATIONAL SAFETY STANDARDS

WIDE CANVAS OF PRODUCTS

CUSTOMER SERVICE AND SATISFACTION

RESPIRATORY PROTECTION

Workers in different industries are prone to respiratory hazards that exist in various forms like gases, vapors, dusts, mists, fumes, smoke, sprays, fog and others. These substances can cause a person's life or serious illnesses if not prevented.

Respirators can provide them protection by removing contaminants from air before it is inhaled. Also, respiratory protective equipments gives the user the adequate protection needed against various contaminants that can endanger their life and health.

- Dusts - such as those found when adding dry ingredients to a mixture.
- Metal fumes - from welding, cutting, and smelting of metals.
- Solvent vapors - from spray coatings, adhesives, paints, strippers, and cleaning solvents.
- Infectious agents - such as tuberculosis bacteria in healthcare settings.
- Chemical hazards - such as chlorine gas and anhydrous ammonia in chemical processing and use operations.
- Sensitizing vapors or dusts - such as isocyanate, certain epoxies, and beryllium.
- Oxygen deficiency - which might be found in confined spaces.
- Pharmaceuticals - during the production of prescription drugs



WHEN SHOULD A RESPIRATOR BE USED?

Workers should use respirators for protection from contaminants in the air only if other hazard control methods are not practical or possible under the circumstances. Respirators should not be the first choice for respiratory protection in workplaces. They should only be used:

- When following the “hierarchy of control” is not possible (elimination, substitution, engineering or administrative controls)
- While engineering controls are being installed or repaired
- When emergencies or other temporary situations arise (e.g., maintenance operations)

HOW TO CHOOSE THE RIGHT RESPIRATOR?

The use of incorrect respiratory protective method can cause considerable health risks and diseases.

Four (4) STEPS in choosing your respirator

1 Identify the contaminants

2 Test the environment

3 Choose a level of Protection

4 Size your respirator

Contaminants:

GASES are substances which at an ambient temperature and pressure are in a liquid or solid state and pass to a gaseous state through boiling or evaporation processes (examples of gas are oxygen, nitrogen, carbon dioxide).

VAPORS are substances which at an ambient temperature and pressure become gaseous through evaporation from a liquid or a solid (examples of vapors are acetone, toluene and hexane). For protection against this type of contaminant it requires a carbon layer filter suitably treated to selectively absorb different substances.

MISTS are tiny droplets that are formed from liquid materials through condensation and atomization processes.

FUMES are formed when a solid material is vaporized through high temperature. The vapor cools quickly and condenses into extremely fine particles.

DUSTS are formed when a solid material is decomposed into tiny fragments.



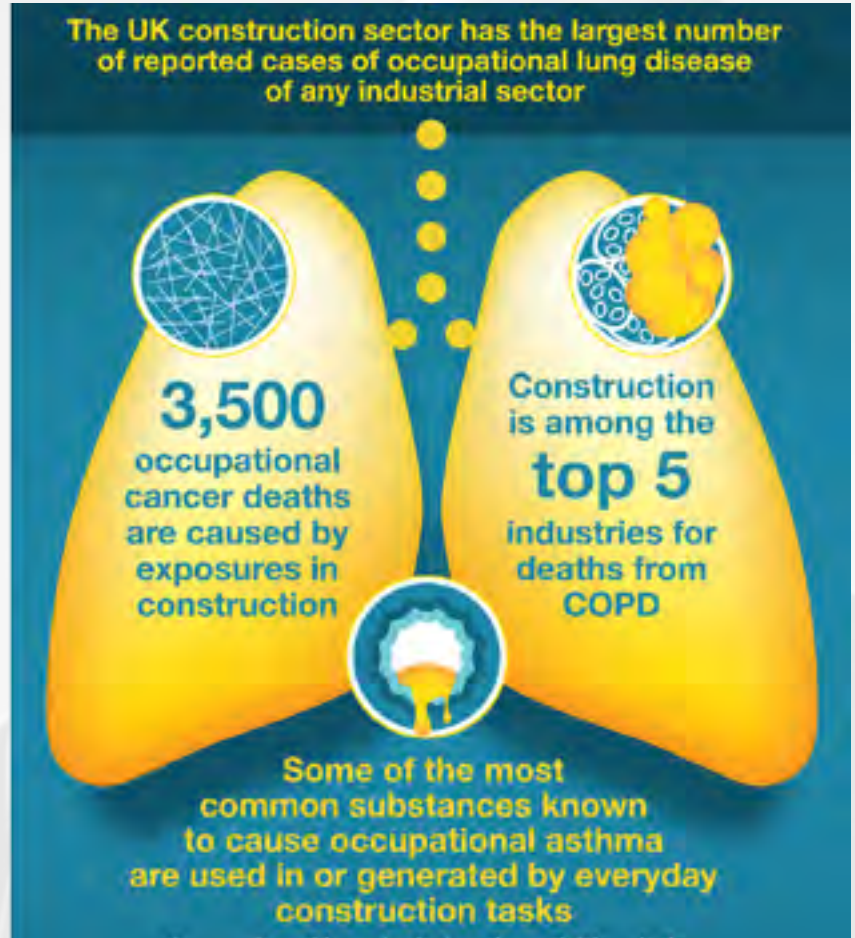
SELECTING THE RIGHT PROTECTION CLASS

To select the right protection against gases and vapors the chemical nature of the pollutant must be known.

Primary objective of using respiratory protection is to prevent exposure to air contamination and avoid complications.

Be sure to consider the following in selecting the right respiratory protection for the job:

- Identify the respiratory hazards present in your workplace.
- Evaluate the hazards that you have identified.
- Conduct testing on the workers to determine if they fit to wear respirators.



Source: British Occupational Hygiene Society (BOHS)

Refer on the below tables to indicate which type of filter to use depending on the contaminant and its concentration, making sure the oxygen level is greater than 17%.

CLASS	1	2	3
CAPACITY	LOW	MEDIUM	HIGH
EXPOSURE LIMIT	1000 ppm	5000 ppm	10000 ppm

	HALF FACE MASKS		FULL FACE MASKS	
	NPF	Max Concentration	NPF	Max Concentration
GAS	50	50xTLV	2000	2000xTLV
GAS P3	48	48xTLV	1000	1000xTLV

*TLV: time-weighted average concentration of a substance to which the operator can be exposed without adverse health effects.

Nominal Protection Factor (NPF) - is a number derived from the maximum percentage of total loss (towards the inside of the breathing apparatus) allowed by European standards.

Assigned Protection Factor (APF) - is the level of respiratory protection that one can realistically expect in the workplace by 95% of the PPE users.



DISPOSABLE RESPIRATORS

Features

- Gives breathing resistance comparable to a P1
- Provides protection to non-volatile solid and liquid particles (dusts, mists, fumes).
- **Support** material has a special texture which give elasticity and resistance to the material even after prolonged use under conditions of high humidity or heavy perspiration.
- **Gasket** material is excellent compression set and deformation combined with an elevated user comfort. The textile layer absorbs sweat and keeps the skin cool and dry.
- **External Protective Micronet** preserves the filtering material from dirt, dust and liquids
- NR (Not reusable), D - passed Dolomite test

Nano Filtration

Particle filtration requirements, as described by European standards on PPE, are focused on micro particles. Test method to verify the protection level of our facemasks against nanoparticles.

Eolo Technology

New fastening system for the membrane of the exhalation valve. The ultralight membrane is fixed on three aligned points instead of a single one to concentrate the exhaled air into two zones of maximum opening.

Standards

- Meets the European Directive 89/686/EEC, CE and EN149:2001+A1:2009

AV-ZERO 30 FFP3 | Art. No: 27107AV529



Gasket

Support

External Protective Micronet



RESPIRATORY PROTECTION

CASES/CARTON: 12 cases

QUANTITY/BOX: 10 pcs





DISPOSABLE RESPIRATORS

Features

- Provides effective respiratory protection in industrial environments where workers will be exposed to non-volatile solid or liquid particles (dusts, mists, fumes).
- Adjustable nose-clip between the filter material layers and soft inner lining on nose, to ensure a good face seal over a range of face sizes.
- R marking to specify that the facepieces is Reusable for more than one work shift.
- D marking to specify that the facepieces meets the clogging resistance requirements and then it offers a high level of filtering efficiency also in very dusty environments.
- Exhalation valve which drops heat and humidity inside the respirator

AV-505B FFP3 | Art. No: 27107AV189



Standards

- Meets the European Directive 89/686/EEC (PPE), CE as a PPE of III category and EN 149:2001+A1:2009



- 1 Wide concavity
- 2 Adjustable internal nose clip



- 3 Soft foam face seal
- 4 Exhalation valve



- Size: Standard
- Color: Natural White



RESPIRATORY PROTECTION



QUANTITY/BOX: 10 pcs

CASES/CARTON: 12 cases



DISPOSABLE RESPIRATORS

Features

- Provides effective respiratory protection in industrial environments where workers will be exposed to non-volatile solid and/or liquid particles (dusts, mists, fumes).
- Non irritating, polypropylene non-woven fabric
- Bendable nose clip
- Adjustable straps
- With exhalation valve
- EVA Micro foam face seal
- NR - Not Reusable, D - passed Dolomite test
- Applicable in warm/humid environments and industrial applications

AV-415 FFP3 | Art. No: 27107AV415



Standards

- Meets EN 149:2001 + A1:2009 FFP3 NR D

RESPIRATORY PROTECTION



- 1 Exhalation valve
- 2 Side pressed seal
- 3 Plastic strap buckles
- 4 Soft foam face seal

- Size: Standard
- Color: Natural white



CASES/CARTON: 20 cases

QUANTITY/BOX: 5 pcs





DISPOSABLE RESPIRATORS

Features

- Flat Fold High Filtration Dust Mask with Exhalation Valve, Contour Design, Bendable Nosepiece and Carbon Filter
- AVES[®] FFP2 respirator masks are made for working environments in which deleterious and mutagenic particles can be found in the breathing air
- Single piece packed offering higher hygiene levels for usage
- It can prevent harmful pollutants such as nonferrous metals, heavy metals, etc. and separate harmful material such as glass fiber, asbestos, etc.

Standards

- Meets the CE, European Council Directive 89/686/EEC, EN 149:2001+A1:2009 - Class FFP2 NR D

AV-449 FFP2 WITH CARBON | Art. No: 27106AV449



RESPIRATORY PROTECTION



- 1 Exhalation valve
- 2 Soft foam face seal
- 3 Bendable Nosepiece
- 4 Strong Elastic Head Strap

- Size: Standard
- Color: Grey



QUANTITY/BOX: 10 pcs

CASES/CARTON: 20 cases

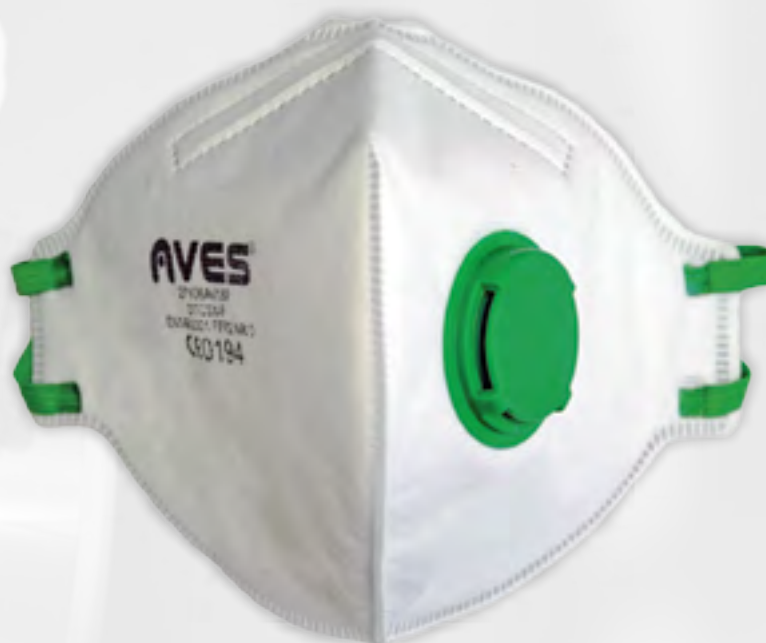


DISPOSABLE RESPIRATORS

Features

- Flat fold high filtration dust mask with exhalation valve, contour design, bendable nosepiece
- AVES® FFP2 respirator masks are made for working environments with deleterious and mutagenic particles that can be found in the breathing air.
- Qualified to Dolomite Clogging Test
- Single piece packed offering higher hygiene levels for usage
- Applications: Includes welding, sanding, sweeping, bagging, grinding and other operations that create dust.

AV-187 FFP2 | Art. No: 27106AV187



Standards

- Meets CE, European Council Directive 89/686/EEC, EN 149:2001+A1:2009 - Class FFP2 NR D

RESPIRATORY PROTECTION



- 1 Bendable nosepiece
- 2 Polypropylene outer shell



- 3 Elastic head strap
- 4 Exhalation valve



- Size: Standard
- Color: White and Green



CASES/CARTON: 20 cases

QUANTITY/BOX: 10 pcs





DISPOSABLE RESPIRATORS

Features

- The N95 respirator filters at least 95% of airborne particles but is not resistant to oil.
- Polypropylene outer shell
- Smooth lining and sweat absorbent
- Bendable nose piece
- Lightweight and comfortable
- Easy breathing
- Protection against non-toxic aerosol, dust and particles.
- Accommodate a wide range of safety equipment, including eye, ear, and face protection.
- Applications: Sanding, sweeping, bagging, grinding and other operations that create dust.

N95 PARTICULATE | Art. No: 2760FT01



Standards

- Meets NIOSH and 42CFR84

RESPIRATORY PROTECTION




- 1 Bendable nose piece
- 2 Elastic head strap
- 3 Tough design shell
- 4 Edge seal

- Size: Standard
- Color: White and Yellow





QUANTITY/BOX: 20 pcs

CASES/CARTON: 20 cases



DISPOSABLE RESPIRATORS

Features

- Dust masks for relief against irritating effects of non-toxic and nuisance dusts.
- Effective from pollen, common household dust, cut grass and other non-toxic particles in industrial & petrochemical fields.
- Bacteria Filtration Efficiency (BFE) up to 99.9% at 3.6 micron particle size
- 100% Polypropylene Construction
- Adjustable Nose Piece
- Low Risk Cup Type for Non-Toxic Environment
- Soft flexible nose bridge to a wide variety of face shapes and sizes.
- Protection: Against non-toxic aerosol, dust and particles.

NON-TOXIC DUST MASK | Art. No: 2759FT01



RESPIRATORY PROTECTION



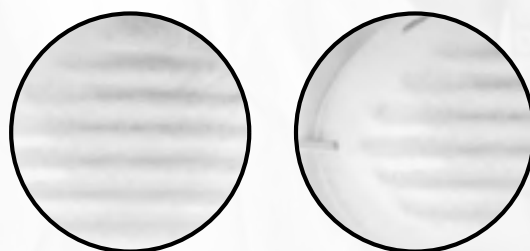
- 1 Bendable nosepiece
- 2 Tough design shell
- 3 Embossed cup

- Size: Standard
- Color: Natural White



CASES/CARTON: 20 cases

QUANTITY/BOX: 50 pcs





Featured Technologies

Vortex technology



Balanced

Better distribution of weight on mask, better stability



Airy

3 flaps on filter holders generate a lamellar air flow, reduce breathing resistance & increase filter life span



Intuitive

Filter is easy to lock in thanks to thread connection



Resistant

Thread connection withstands time wear



LiveVisor



Clear

Live visor allows a distortion-free visual field



Resistant

Anti-scratch, anti-fog and anti-acid treated



Comfortable

The visor prevents sight weariness



Tested

Optical class 1 tested (EN 166): protects from most common risks



K-omfort



Secure

Attached to a rigid frame, harness always fits perfectly



Balanced

Mask weight is conveyed evenly



Non-marking

Once worn, it doesn't mark user's face



Adjustable

4 (half masks) or 6 (full face masks) buckles for a more precise and comfortable adjustment





FULL FACE MASK

Features

- Characterized by a soft rubber facepiece, an adjustable head harness with six fast release buckles and panoramic visor
- The inner mask is equipped with two inhalation valves to reduce visor misting and assist comfort
- The central connection for filters is threaded according to EN 148-1 standard, to be used with all the devices fitted with same EN 148-1 male threaded connection (gas, particle and combined filters, power assisted filtering devices)
- Protection: Harmful aerosol, Particles, Gases Aeronautics, Painting, Laboratories
- Applicable Cartridges: AV-414, AV-425

AV-BLS 5150 (SINGLE FILTER) | Art. 2881AV28



Standards

- Meets CE, EN 136:1998, European Directive 89/686/EEC, as a PPE of III category

Applications

- Pharmaceutical industry, Constructions, Chemicals, Agriculture, Wood making, Shipyards, Aeronautics, Painting, Laboratories

RESPIRATORY PROTECTION



THERMOPLASTIC RUBBER FACESEAL

UNIFIED EN 148-1 FITTING

CLASS: 3



FULL FACE MASK

Features

- Double filter full face mask equipped by a comfortable and soft rubber facepiece, adjustable head harness with six fast release buckles and a panoramic visor
- The inner mask is equipped with two inhalation valves, to reduce visor misting and assist comfort
- It has good face fitting that prevents inward leakage plus it has two lateral connections to be used with AV-300 series filters equipped with Vortex technology
- Protection: Harmful aerosol, Particles, Gases
- Applicable Cartridges: AV-314, AV-322, AV-354

Standards

- Meets CE, EN 136:1998, European Directive 89/686/EEC, as a PPE of III category

Applications

- Pharmaceutical industry, Constructions, Chemicals, Agriculture, Wood making, Shipyards, Aeronautics, Painting, Laboratories

AV-BLS 5250 (DOUBLE FILTER) | Art. 2881AV26



RESPIRATORY PROTECTION



CLASS: 2

THREAD FITTING

THERMOPLASTIC RUBBER FACESEAL



HALF FACE MASK

Features

- Mask has 2 side filter holders, a synthetic rubber orinasal, an ergonomic harness with 4 couplings and a headrest connected to a supporting rigid part
- The frontal exhalation valve and two lateral inhalation valves can be fitted with special threaded connection mount. Its filter holders has flaps inside to ensure good air flow and makes the air circulation easier
- Has a support harness for more comfortable fit
- Protection: Harmful aerosol, Particles, Gases
- Applicable Cartridges: AV-314, AV-322

AV-TP2000S | Art. 2840AV31



Standards

- Meets CE, EN 140:1998, European Directive 89/686/EEC, as a PPE of Category III

Applications

- Pharmaceutical industry, Chemical, Constructions, Agriculture, Wood making, Shipyards, Aeronautics, Painting, Laboratories

RESPIRATORY PROTECTION



SILICON RUBBER FACESEAL

THREAD FITTING

CERTIFICATION: EN140



HALF FACE MASK

Features

- Equipped with a synthetic rubber orinasal in single size, an ergonomic harness with four couplings, provided with an head rest adaptable by the user connected to a supporting rigid part
- The half mask comprises a frontal exhalation valve and two lateral inhalation valves fitted with special threaded connection mounting two AV-300 series filters, equipped with the same connection
- Protection: Harmful aerosol, Particles, Gases
- Applicable Cartridges: AV-314, AV-322

Standards

- Meets CE, EN 140:1998, European Directive 89/686/EEC, as a PPE of Category III

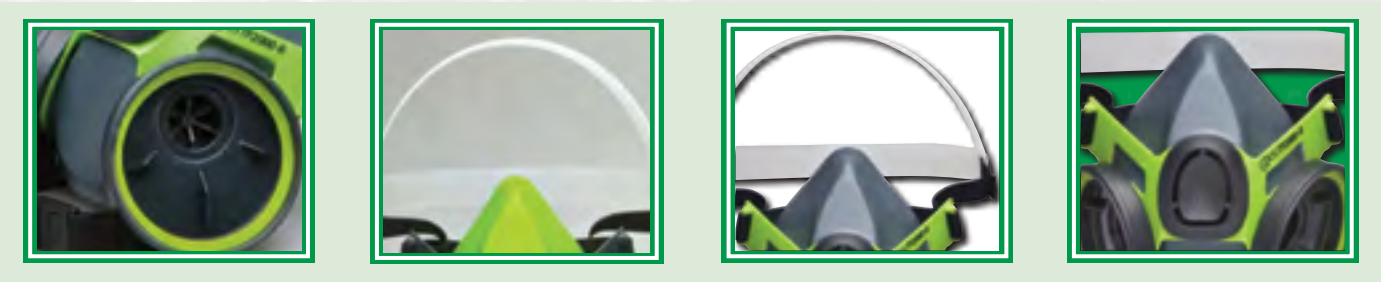
Applications

- Pharmaceutical industry, Chemical, Constructions, Agriculture, Wood making, Shipyards, Aeronautics, Painting, Laboratories

AV-TP2000R | Art. 2881AV32



RESPIRATORY PROTECTION



CERTIFICATION: EN140

THREAD FITTING

THERMOPLASTIC RUBBER FACESEAL



HALF FACE MASK

Features

- Equipped with one filter holder, two lateral exhalation valves and one frontal inhalation valve which can be equipped with one particle, gas or combined filters
- Has green silicone rubber orinasal, an ergonomic harness with four couplings and a headrest connected to a supporting rigid part.
- Silicone facepiece is well-made to ensure maximum comfort. In addition, its harness is easy to adjust due to its blocking system.
- Protection: Harmful aerosol, Particles, Gases Aeronautics, Painting, Laboratories
- Applicable Cartridges: AV-414

AV-SGE46 | Art. 2840AV33



Standards

- Meets CE, EN 140:1998, European Directive 89/686/EEC, as a PPE of Category III

Applications

- Pharmaceutical industry, Chemical, Constructions, Agriculture, Wood making, Shipyards, Aeronautics, Painting, Laboratories

RESPIRATORY PROTECTION



SILICON RUBBER FACESEAL

UNIFIED EN 148-1 FITTING

CERTIFICATION: EN140





HALF FACE MASK



RESPIRATORY PROTECTION



FILTER CARTRIDGE

STANDARD CONNECTION FILTERS

THREAD CONNECTION FILTERS



RESPIRATORY PROTECTION

	PRODUCT	ARTICLE NO.	PROTECTION	FEATURES
STANDARD	A AV-414 FILTER ABE2	37158AV417	Organic, inorganic and acid gases and vapours, Class 2	
	B AV-425 FILTER ABEK2P3 R *	37158AV320	Organic, inorganic and acid gases and vapours, ammonia, Class 2, and dust	
THREAD	C AV-314 FILTER ABEK1	37158AV316	Organic, inorganic and acid gases & vapours and ammonia and derivatives, class 1	
	D AV-322 FILTER ABEK1P3 R	37158AV317	Organic, inorganic and acid gases and vapours and ammonia and derivatives, class 1 and dusts	
	E AV-354 FILTER ABEK2P3 R **	37158AV318	Organic, inorganic and acid gases and vapours and ammonia and derivatives, class 2 and dusts	
NOTE	* The filter thus marked cannot be used with AV-SGE46 half mask because filter weight exceeds 300g (EN 140) ** The filter thus marked cannot be used with AV-TP2000S half masks because filter weight pair exceeds 300g (EN 140)			

The European Standard 14387:2004+A1: 2008 defines protection against gases and vapours according to the following table:

TYPE	COLOR	PROTECTION
A	Brown	Organic gases and vapours with a boiling point higher than 65°C
B	Grey	Inorganic gases and vapours
E	Yellow	Acid gases
K	Green	Ammonia and derivatives
AX	Brown	Organic gases and vapours with a boiling point lower than 65°C



FILTER CARTRIDGE



RESPIRATORY PROTECTION



EMERGENCY ESCAPE HOODS

Features

- The unique design makes the hood extremely comfortable to wear and easy to put on
- Half-mask is made of silicone
- Neck cuff is specially woven for the closest possible fit and maximum elasticity
- Twin exhaust valves ensure low respiratory resistance
- Intended to be used to protect the airways against particles and chemicals in gas form for a limited time.
- Approx. 550g, depending on type of filter
- CE approved according to EN 140
- Sizes: One size fits all adults
- Comes with carrying bag with belt
- Hood Model: 7012P10022 with filter of A2B2E2K2P3

ESCAPE HOOD | Art. 2840FT79

10 years shelf life



Features

- Developed to exceed all demands for escape hoods and is highly recommended for concentrations above 1000 ppm
- Extremely low leakage, combined with the high class filter, gives significantly longer action time or protection for higher concentrations of dangerous substances
- Test average in breathing zone is 0.06%, where 5% is the limit. In ocular zone, it is 0.6%, where 20% is the limit
- Shelf life for the filter is 10 years, which equals the best on the market
- CE approved as half mask according to EN 140, with additional requirements from EN 403 relevant for use as Escape Hood
- Sizes: One size fits all adults
- Comes with carrying bag with belt and brackets for wall mount
- Hood Model: 7012P50022 with filter of A2B2E2K2P3

ESCAPE HOOD XTREME | Art. 2840FT89

10 years shelf life



EMERGENCY ESCAPE HOODS

CARRYING BAG

IMPORTANT FOR SAFETY

The chemical escape hood comes with a soft carrying bag in a water resistant, strong and durable material. The format is very compact, only approximately 21x12x11 cm /8.3x4.7x4.3 in.

It has a zipper, which is water proof, for easy opening. In the rear, there is a pocket for filter date, name or a safety card. The bag can be worn on a belt, carried over the shoulder or round the waist. It also has brackets for wall mount.

The bag is very important as it makes the hood easy to bring, when working in risk environments



ESCAPE HOOD FILTERS

- Escape hoods use class 2 filters and gives the user a higher level of protection, or longer action time
- See the table for breakthrough times for filters in concentrations as high as 5000 ppm



Explanation filter coding		
Filter type	Colour code	Protects from
A	Brown	Organic gases w boilingpoint >65°C/150°F
B	Grey	Inorganic gases and vapours
E	Yellow	Sulphuric dioxide (SO ₂)
K	Green	Ammonia (NH ₃)
P	White	Particles

Break-through times for filters, according to EN 14387:2002			
Filter type	Chemical substance	Concentration (ppm)	Time (minutes)
A2	Cyclohexane (C ₆ H ₁₂)	5000	35
B2	Chlorine (Cl ₂)	5000	20
	Hydrogen sulfide (H ₂ S)	5000	40
	Hydrogen cyanide (HCN)	5000	25
E2	Sulfur dioxide (SO ₂)	5000	20
K2	Ammonia (NH ₃)	5000	40

58 min. protection H₂S 10000 PPM

On customer request, the TST Xtreme Hood has been tested for H₂S in higher concentrations. Breakthrough time for 10,000 ppm was 58 minutes and for 20,000 ppm was 24 minutes.

AVES®

BLS
MADE IN ITALY



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