STAY SAFE

DURAM MASK
PERSONAL ESCAPE MASK
The Escape Mindset

Awareness of the importance of work environment safety and the potential implications of workplace injuries and death is constantly rising. The costs of accidents in the workplace, in the form of legal liability, insurance expenses, and damage to reputation, have become such a concern that many organizations have adopted the concept of "zero casualties" as a guideline for their safety policies.

Industrial settings in particular present a concern, as they can very suddenly turn toxic and hazardous due to accidents. The most common danger is fire, in which the main cause of injuries is not burns, but rather smoke inhalation. In emergencies such as these, a calm and levelheaded response is crucial.

Industrial settings also have a potential for chemical spills in which there is a high risk of sudden exposure to toxic liquids, aerosols, and gases. Exposure to smoke and to hazardous chemical or biological agents can quickly become debilitating, making escape very difficult or even impossible.

Other settings in which swift and calm evacuation might become necessary are high-rise development projects and office buildings, which are susceptible not only to fires but also to terrorist attacks. In case of a fire or other emergency, an evacuation of such crowded places might be slower than desired, increasing the risk of exposure to smoke and harmful gases.

The Solution

The ideal solution for these potential risks is a personal escape mask which can be carried on one's person at all times. The Duram Personal Escape Mask is an accessible and easy-to-use respiratory protection device which covers the entire head, protecting the respiratory system and the eyes. The hood is made of a single unit of neoprene rubber with a flexible opening which seals around the neck, making fastening straps unnecessary. This allows the hood to be worn by people with facial hair and even to be worn while wearing eyeglasses, if necessary for escape.

All Duram masks are M class (mobile) and their compact size makes it possible to carry them around in a pocket or in a pouch throughout the workday, making them immediately and easily accessible in case of emergency. Their minimal size also makes them unobtrusive enough to be placed in multiple locations around the workplace, thereby increasing their accessibility.
The Duram Mask

Rubber Hood

The hood is made of Polychloroprene Latex with unique mechanical and thermal properties:
- High tensile strength
- High elasticity (stretches up to 800% of original length) allowing quick donning and tight neck-sealing
- Resistance to high temperatures
- Fire-retardant

Panoramic Visor

The mask's visor is made of ETFE, a co-polymer with several special features:
- High tensile strength
- High transparency
- Heat-resistance
- Fire-retardant

Escape Hoods

Escape hoods are a type of personal protective equipment intended for use in emergencies involving harmful gases and smoke. They provide short-term respiratory protection as well as protection of the eyes and hair. The hood buys time in case of emergency and allows the wearer to evacuate safely and calmly.

Composition of the Hood

- Fire retardant Neoprene Hood
- Fire retardant ETFE visor
- Innovative exhalation valve
- Gas and particle filter
- Neck seal for full respiratory protection
Filters
The range of masks comes with three types of filters:

1. **Multi-Layer Filter**
   - Electrostatic particle filter
   - Layers of activated charcoal cloth with impregnation against acidic gases

2. **CO Filter**
   Two canisters containing:
   - Electrostatic particle filter
   - Layers of activated charcoal cloth with impregnation against acidic gases
   - Catalyst
   - Desiccant

3. **ABEK 1 Filter**
   A universally used filter compliant with the EN14387 Standard, able to filter the following in concentrations of up to 1000 ppm:
   - Organic gases
   - Inorganic gases
   - Ammonia

Inhalation / Exhalation Valve
A patent developed by Duram Mask. A unique system combining two unidirectional valves: an inhalation valve and an exhalation valve connected to a mouthpiece.

Packaging and Shelf Life
The mask is packed in a sealed vacuum pack that keeps it effective and ready for use for five years. Each package contains clearly illustrated donning instructions (OEM requests welcomed). For ease of carrying, the masks are offered with an assortment of tailor-made pouches.
The Masks

Duram Mask offers five types of masks which can be tailored according to customer requirements.

**MASKITO**

An ultra-compact mask designed for incidents of fire, making it suitable for almost every setting. The mask filters out HCl, NO₂, C₆H₁₂, tear gas (CS), and SO₂ (not designed to filter out CO). The MASKITO Mask was tested at the ASSAY TECHNOLOGY labs. The MASKITO is smaller than most modern smartphones and can be carried comfortably in a pants or shirt pocket.

**KIMI**

A compact mask designed for situations of chemical spills and terrorist attacks. The KIMI protects against organic gases with a boiling point higher than 65°C; several inorganic gases; sulphuric gases and other acidic gases, as well as ammonia and ammonia derivatives. It also protects against these substances in particle form. (tested at the ASSAY TECHNOLOGY labs). The KIMI is an ideal solution for situations involving relatively low levels of these hazardous materials (under 500 ppm). It is best suited for mining, oil, and gas operations; chemical and petrochemical industries; and for civilian institutions and high-rise buildings.

**KIMI PLUS**

The KIMI PLUS is a somewhat larger version of the KIMI, designed for the same range of chemicals, but with an extended filtration capacity achieved through two standard ABEK 1 filters, making it suitable for situations involving those chemicals in levels of up to 1000 ppm. The KIMI PLUS weighs only 450 grams (1 lb.), making it one of the lightest in its category. Its robust protection against chemical hazards makes it especially suited for heavy chemical industries.

**COGO**

The COGO is a smoke escape mask designed for both smoke and Carbon Monoxide filtration. It is tested for protection against CO, HCl, HCN and propenal (acrolein), is certified under European Standard EN-403, and bears the European Union CE Mark. A variant of this mask intended for petrochemical industries, the COGO-S, is designed to provide protection against sulphuric gases, and has been tested against H₂S and SO₂.

**CHEMBAYO**

The CHEMBAYO is meant to provide short-term protection against chemical and biological agents used in weaponized form. The mask is specifically designed against nerve and blood agents (also compliant with the EN 143 Standard for particle filtration), and the filters also contain a HEPA P3 component which protects against particles and aerosols, substantially reducing respiratory exposure to chemical and biological hazards. These capabilities make the CHEMBAYO an ideal solution for military forces, law enforcement agencies, and emergency services personnel.
Mining, oil and gas

Chemical and petrochemical

Transportation

Defense