









Impertech is a leading manufacturer of CBRN protective solutions including an innovative range of professional gas masks and respirators for different sectors. Our personal protective equipment (PPE) is relied upon by the defence & military sector, in many hazardous work environments, and by medical teams and first responders

## **OUR STRENGTHS**

### Ingenious R&D team and success-oriented shop floor

Our R&D team include engineers who specialize in materials, chemical, mechanical and aeronautical engineering. Our dynamic shop floor is always in change and evolution, as machines and assembly lines are constructed within days to supply the requested products and meet our clients' needs.

#### Global reach

Our clients include armies, defence departments and special combat units from all corners of the globe. Our logistic facilities in north america and europe help us meet strict delivery demands.

## Committed to quality

We work in accordance with global standards that ensure qualified manufacturing. We manufacture products that are installed in vehicles, aircraft, and life-saving devices that are used by millions of people all over the world. Therefore, and as also required by strict manufacturing regulations, our quality assurance team supervises all stages of production – from raw material delivery to final product packaging. We apply continuous testing and validation to all manufacturing stages while adhering to strict international standardization.

## Agility Encrypted in Our DNA

As we work closely with security forces, medical staff and first responders, we are always there to offer solutions for hazardous environment. Our organization's culture, leadership and strategy are to always be in continuous evolution, to be able to see today the challenges of tomorrow and be ready for them with the most advanced products.

## **OUR FIELDS OF EXPERTISE**

### Military CBRN Equipment

Impertech LTD. has been producing and supplying CBRN kits for over 4 decades to the Israeli Ministry of Defense and elite security forces worldwide. These CBRN military kits are exclusively sold to selected militaries and elite defense forces and meet the highest requirements and standards.

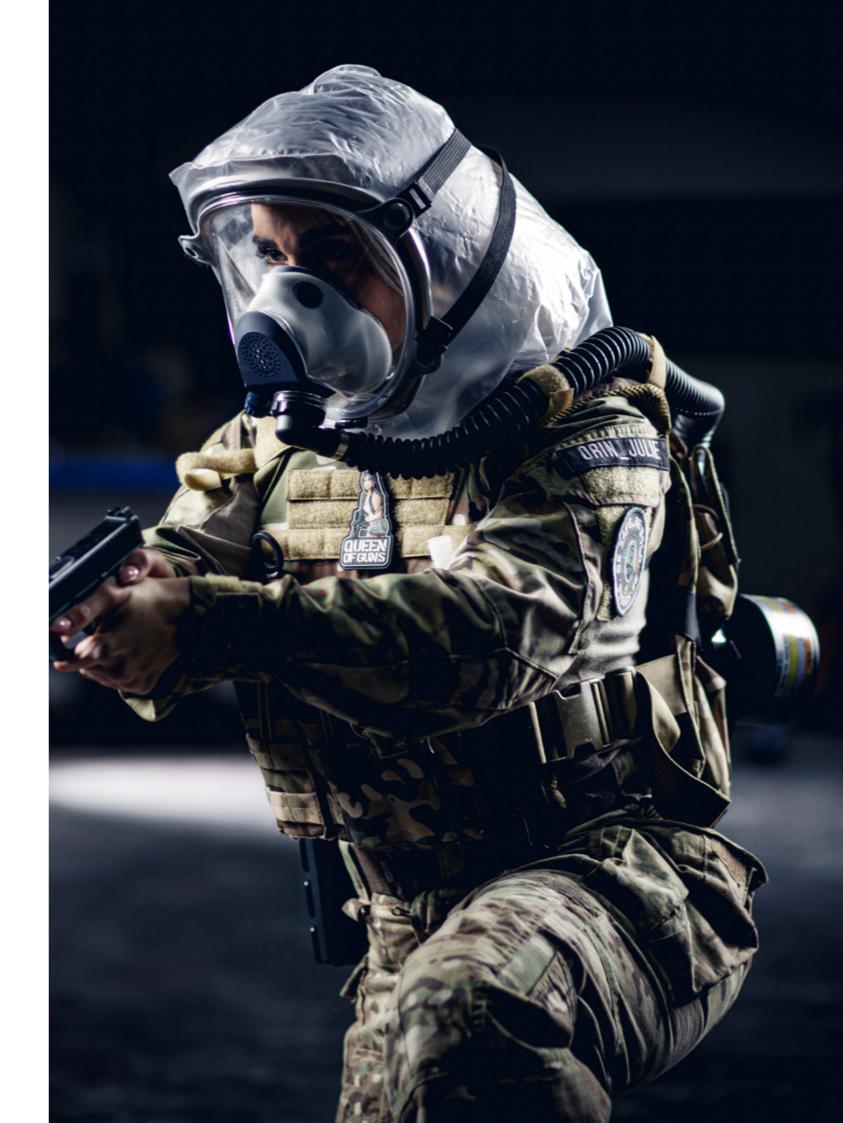
The CBRN kit contains high-quality products which protect users in the defense forces and global communities in times of chemical, biological and radiological threats.

#### Civilian CBRN Kits

The Survival CBRN Family Kit includes the sapphire CBRN system for parents. The Quartz protective hood for children and infants. The Pet Respiratory protection tent for family pets. All parts of the Super Safe systems in this kit are of the highest level of safety that meets the highest military standards.

#### **Medical PPE**

Our personal protective equipment (PPE) is also used in many hazardous work environments, by medical and rescue teams. Since the start of the COVID-19 pandemic, Impertech has set up large-scale production facilities to mass-produce PPE products, including 3-ply surgical face masks and protective suits and hoods with filters and respirators for medical personnel.





Impertech-Safety is a reliable producer and efficient supplier of CBRN Military kits to the Israeli Defense Forces and to armies worldwide. Our CBRN military kits are exclusively sold to elite military and defense forces and meet the most stringent requirements and standards.

#### Kit includes the following:

1x Sapphire military gas mask /IM76 gas mask

2x New sealed NBC filters

Onyx 90 blower + battery case + 8 batteries

Aquamarine Type III - CBRN saratoga CBRN suit

Rubber overboots

Butyl rubber gloves

Rugged water resistant black branded bag (fits all items)

Kit can be tailored to your preferences and specifications













## AQUAMARINE TYPE III HAZMAT SUIT

NSN No: 4240-31-009-1842

#### The Aquamarine Type III Hazmat Suit

Is made of durable fabric which offers excellent protection from an extensive range of chemicals. It shields personnel against a variety of toxic industrial organic chemicals, highly concentrated inorganic chemicals, particulates, biohazards and certain chemical warfare agents.

## COMPATIBLE WITH INTERNATIONAL STANDARDS















#### **Technical and certification standards info for Aquamarine Type III:**

Chemical protective clothing, category III	Type 3-B, 4-B, 5-B and 6-B
Certified according to regulation	(EU) 2016/425
EN 14126 (barrier to infective agents)	
Antistatic treatment	(EN 1149-5)
Double closure of zipper and flap closure system for higher protection	
EN 1073-2	Radiation and contamination
EN 1149-1	Antistatic treatment
EN 13034	Liquid chemicals
EN 14605	Liquid chemicals
EN 374-1	Dangerous chemicals and micro-organisms
EN ISO 13982-1	solid particulates







# SAPPHIRE PROTECTIVE MASK & HOOD

Specially made to meet the latest challenges in CBRN, The Sapphire Protective Hood provides superior protection and optimal comfort. Shaped for maximum seal, the hood protects regardless of facial structure or manual dexterity. Designed for individuals aged 13 years and above. Ideal for: Police and law enforcement first responders and medical teams.

#### **Special Features**

#### **Protection**

- Protection factor of 10,000 PPM
- Positive pressure system
- Blower supplies air up to 90 L/minute for improved protection and comfort
- Panoramic polycarbonate visor
- Clear optically correct vision

#### **User Comfort**

- Made of soft PVC PA laminate, one-size fits all
- Seals around the neck
- Easy to don and doff, comfortable for prolonged use
- Nose-cup easily positioned
- Compatible with eyeglasses
- Can be used with beard or long hear
- Tightened with 2 diagonal straps with quick release buckels



#### **Testing processes:**

ASTM D 624 - | ASTM D 638 | ASTM D 882 | ASTM D 1938 ASTM D 2240 | ASTM D 2261 | ASTM D 2582

#### **Compatible with international standards:**

EN 166: 1995 | EN 167: 1995 | EN 168: 1995 | EN - 148-1 | DIN 53508 | DIN 53512 | DIN 53505 | DIN 53504

#### Shelf life:

10 years in original packaging.



## M15sp MILITARY GAS MASK

The M-15sp NBC face mask provides a highest level of protection against CBRN threats and complies with the European EN 136 standard. The M15 Gas Mask is originally designed for military and police personnel, providing eye, face and respiratory protection against all known agents.

#### **Special Features**

#### **Comfort and communication:**

- The mask is lightweight and allows for maximum comfort
- Formulated from special rubber material for high resistance to chemical and biological warfare agents
- · Wide field of vision
- The mask includes a speaking diaphragm which enables effective communication.
- NATO standard filter connector (RD40 according to EN 148)

#### Long shelf life:

- 15 years shelf life
- The visor is made from clear polycarbonate coated with a scratch-resistant finish to prevent the accumulation of water vapor on the visor and creates a clear field of view for users.
- Vision range 85%







## QUARTZ - PROTECTIVE MASK AND HOOD FOR KIDS

Powered Air Purifying Respirator for Infant & Child

The Infant and Child Shield Hood is a unique respiration system engineered to keep children and infants safe from airborne threats.

The colorful design appeals to children. The system is manufactured and tested according to the specifications of the Israeli Defense Forces and the Ministry of Defense. It has been provided to every newborn in Israel.

#### **Special Features**

#### **Protection**

- Protection factor of 10,000 PPM
- Positive pressure system: 45 liter/minute blower supplies three times the amount needed by a child
- Hood-shaped for maximum seal
- Panoramic visor for maximal field of vision
- Clear vision

#### **User Comfort**

- One size fits all: from toddlers to 12 years-old children
- Easy to don and doff
- Comfortable for prolonged use
- Internal drinking mechanism: allows baby formula feeding and liquid consumption via straw







#### **Testing processes:**

ASTM D 624 - | ASTM D 638 | ASTM D 882 | ASTM D 1938 ASTM D 2240 | ASTM D 2261 | ASTM D 2582

#### **Compatible with international standards:**

EN 166: 1995 | EN 167: 1995 | EN 168: 1995 | EN - 148-1 | DIN 53508 | DIN 53512 | DIN 53505 | DIN 53504

#### Shelf life:

Shelf life of 10 years in RT conditions.



### PET RESPIRATORY TENT

Powered Air Purifying Respirator for Pets

This durable protection tent with adjustable air supply is designed to supply CBRN and viral protection under threat or complex health conditions for pets. The tent is made of transparent durable laminate-230 that allows to observe and interact with animals inside.

#### **Special Features**

#### **Protection**

- Powerful CBRN blower supplying approx. 90 liters of air per minutes.
- Overpressure inside the tent prevents entry of contaminants
- 5.8V lithium batteries with at least 15 hours of continuous operation
- Tent is connected to military-type CBRN filters

#### **Durability**

 Tent is made from resilient laminate PVC Filter has a sturdy military design and can be reused if not exposed to chemical/ radioactive hazards



\* Warning - the products isn't intended for kids.

#### **User comfort:**

- Quick to assemble and connect to blower
- Allows interaction with animals inside
- Can contain more than one animal, weighing up to 10 kg in total
- Total length 1300 mm
- Volume of 400 liters
- Provides 13 air change cycles per hour
- Comfortable mat of synthetic grass



Includes the Onyx 90 blower







## **CBRN PROTECTIVE SUIT**

For Hot Climates HCS - Saratoga

This two piece suit is customized for challenging operational conditions in hot and humid environments. The highly air-permeable SARATOGA® system minimizes heat stress and maximizes wear time and mission capability, maintaining superior CBRN protective performance.







- Zip to connect jacket and trousers
- Sleeve closure with inner cuffs
- Leg closure with elastic filter fabric

#### Technical data: SARATOGA® CBRN protective suit for hot climates

#### **Outer shell material**

- 100 % cotton
- Oil and water repellent
- Flame retardant

#### Filter material

- Cotton/polyester woven
- Spherical asorbers
- Polyamide non-woven

The performance of both the shell and the filter materials has to be controlled thoroughly to ensure the perfect functioning of the entire material combination. 24 hour protection against 10 g/m² liquid HD, GD, at least six hours of protection against 4,000 mg·min/m³ gaseous HD. Suit Sizes: S- 3XL in short, regular and long variants

Only SARATOGA® meets the requirement of 30 days of wear time. The suit can be stored in the original packaging for up to ten years and it can be washed up to ten times at 40°C without diminishing the required protective performance. The suit weights 1.9 kg in size L.



## **BL90 - ONYX90**

NSN No: 4240-31-018-6875

The blower enhances user comfort and tactical advantages while using gas masks, making breathing easier and more fluent. Overpressure prevents the entry of chemical and biological agents. Designed for professionals engaged in strenuous activity, like evacuation forces, first responders, and medical personnel.



## ANGORA (BL45) ONYX45

NSN No: 4240-31-008-8969

Compact, easy to carry, fitted for field conditions. Onyx blowers draw filtered air from NBC filters, supplying it via a flexible hose to various kinds of respirator hoods and masks. Overpressure prevents the entry of chemical and biological agents. Designed for professionals engaged in strenuous activity, like evacuation forces, first responders, and medical personnel.

#### **Special Features**

#### **User Comfort:**

- Strong construction made of polycarbonate
- Enhances the comfort of standard rubber masks by making it easy to breath
- Unlimited freedom of motion: fitted with loops and can be clipped on hip, back or leg
- Fits all types of personal filter canisters with a standard NATO thread (40mm X 1/7")

#### **Protection**

- Overpressure within the mask prevents entry of chemical and biological agents
- Equipped with a monitor lamp so that users can verify its proper operation at all
- Supplies approx. 45 liters of air per minute

#### **Specs**

- Weight (including battery): Up to 550 g
- Power supply: 1 lithium sulphur/dioxide battery
- Operating voltage: 3 volts
- Air flow: 45/min
- 25 hours with 4 lithium batteries A123







## SIMPLEX - BLACK DIAMOND GAS MASK

NSN NO: 4240-31-018-6851

The Black Diamond (Simplex) Gas Mask is used to protect users' face, eyes and respiratory tracts against NBC threats. The mask is manufactured in accordance with Israeli Defense Forces technical specifications (strictest protection system standards). This specific Black Diamond (Simplex) Gas Mask was provided to every citizen in Israel during the Gulf war.

#### **Special Features**

#### **Strict manufacturing process:**

The Black Diamond (Simplex) Gas Mask is manufactured from a rubber mixture that resists chemical agent penetration.

#### **Comfort & communication:**

The Black Diamond Simplex Gas Mask is lightweight and allows maximum comfort, effective communication, and the ability to drink fluids during use.

#### **Active protection:**

The Black Diamond Simplex Gas Mask can connect to an external air blower (like the ONYX-45 Blower) via a flexible hose using the appropriate adapters (provided separately per client requirements) and can be transformed into an active protection system.

#### Long shelf life

The Black Diamond (Simplex) Gas Mask has a long shelf life (up to 20 years in the original packaging).





## HEMATITE CBRN FILTER

Manufactured per specifications of the Israeli Defense Forces and the Israeli Ministry of Defense, the Hematite CBRN filter has a rigid outer envelope and internal layers needed to withstand physical impacts and blows. The filter's structure combines low resistance breathing with high mechanical resistance and excellent shielding properties.

#### **Special Features**

#### Materials

- Construction material Nuril + 10% GF
- Particulate Filter HEPA H13

#### **Dimensions**

- Height: excluded thread: 63±1 mm
- Include thread: 82±1 mm
- Diameter: 114±1 mm
- Maximum Weight: 270 g



## P3 FILTER

The P3 Filter protects against biological threats, airborne particles, meeting the standard EN 143:2000 class P3 R (reuse). For use with full-face mask and half-face mask. Screw suitable for use with NATO Standard RD 40X1/7' thread according to EN148-1.

EN Standard: EN143:2000 + A1:2006, EN 148-1 | Markings: EN148-1 thread connection | Notified Body: ITALCERT SRL NB 0426 | Protection Factor: 1000X N.P.F. 40X A.P.F. (20 with Gas filter) (BS4275) | Limitations: Do not use in confined spaces or places with an oxygen level lower than 19% | Storage conditions: temperature: 10-50 Celsius, humidity: 80%, shelf life: 5 years

#### **Special Features**

#### **Materials**

- Construction material Nuril + 10% GF
- Particulate Filter HEPA H13













#### Dimensions

- Height: excluded thread: 32±1 mm
- Include thread: 60±1 mm
- Diameter: 113±1 mm
- Maximum Weight: 150 g







The future of CBRN masks is here: the IM76 is designed to meet challenges and withstand extreme conditions like never before! With its patented panoramic visor, advanced multi-feature interface platform and versatile filter attachments, the IM76 is the protection against CBRN threats you need for your fighters facing new threats.

#### **Fully Equipped And Provided With Accessories**

Tactical visor Sunglasses Optical visor • CBRN filter • Breathing tube • 45/90 Liter Drinking bag

Carrying case

Textile harnessing





Sunglasses

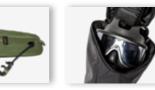


Optical visor

Tactical visor







Breathing tube 45/90 Liter blower





## **NBC HAND & LEG COVERING**

Hands & feet protection

#### **Protective Overshoes**

- Protective overshoes for type III Aquamarine Respiratory Suit.
- Adjustable lace for easy fitting. Designed for prolonged use by designated NBC forces.
- Manufactured and tested in accordance with Israeli Defense Forces specifications. Protective Overshoes Type I & Type III are available in several sizes.



#### **Protective Boots**

- Made of strong butyl rubber.
- Total impermeability to chemical and biological warfare agents for at least six hours.
- A supplement for maximum body protection. Worn instead of shoes. Intended mainly for strenuous work and prolonged walking.
- Designed for stable walking on all surface types.
- Available in several sizes.



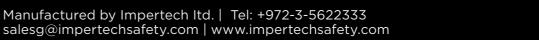
#### **Protective Gloves**

- Set includes rubber gloves and cotton-fabric gloves.
- Rubber gloves made out of strong, resistant, flexible and especially thin butyl rubber.
- Offer both dexterity and protection.
- Impermeable to chemical and biological warfare agents for at least 6 hours. Manufactured in accordance with U.S.
- Military specification MIL-G-43976.
- Cotton-fabric gloves absorb perspiration and are designed to be worn beneath the rubber gloves.





Textile harnessing





## COMING SOON: THE IB-76 PAPR BLOWER

The IB76 is a cutting-edge development by Impertech industries, designed to upgrade the primary defense for every man and woman operating in hazardous chemical environments. It combined better safety with greater comfort. With its innovative 3D flexible carrier and harnessing system, the IB76 is designed to adapt itself to body movements and shape. Its compact size can suit every need and activity. Several harnessing constructions allow mounting in different ways, to wear on the back, on the thigh, or on the waist, according to convenience or tactical preferences.

#### **Unique features and accessories**

#### Flexible structure

 Flexible 3D design allowing to adjust the blower to every curve, body structure, and the fluid following of body movement, as well as providing shock and impact absorption capabilities.

#### **Ergonomic design**

- Ergonomic structure the weight of the blower is evenly distributed so it's easier to wear and keeps the blower closer to the body and shaking less.
- Removable battery pack allowing external charging and the removal of pack with empty battery and its replacement with a new pack with a full battery.
- Frontal battery position makes for easier operation and allows new batteries to be easily and safely screwed on

#### **Compact modular carrier unit**

 Three types of straps allow modularity in wearing the blower for max user comfort
on the back, on the thigh, or on the waist.

#### **Smart hose**

- Smart air supply system that includes an integral on and off button located near the air inlet of the mask and allowing convenient control over blower's on and off functions.
- Air supply hose is durable, flexible and long

#### **Quiet operation**

Patented rubber rings system embedded in the blower's body absorbs impact and allows quiet operation.

#### **IB-76 specifications**

- Airflow Up to 120 I/min
- Rechargeable battery pack providing up to 7 hours of working time in CBRN environment.
- Unique flexible 3d harnessing system
- All connectors are NATO RD40 standard threads
- Battery and air flow alarm







