

**JacTone**<sup>®</sup>

**FASTACT**<sup>®</sup>

A person wearing a full-body yellow hazmat suit and a respirator mask is shown in a field. They are holding a white spray canister labeled 'FASTACT' and spraying a white mist. The background shows some dry vegetation.

**CBRN AND HAZMAT  
FIRST RESPONSE**

**CONTAINMENT & NEUTRALISATION & DECONTAMINATION**

## ONE PRODUCT ONLY FAST-ACT®

The range of physical, chemical and toxicological properties of Toxic Industrial Chemicals (Hazardous Materials) and Chemical Warfare Agents presents a considerable challenge for their destruction and detoxification by decontamination formulations and procedures which may well be effective for Chemical Warfare Agent contamination. For treatment of such military and civilian incidents various products are employed: acid and base neutralizers, all-purpose absorbents, oil only absorbents, hazardous liquid absorbents, spill kits, decontaminating foams, spill containment and material handling products.



**ONLY ONE PRODUCT CAN DEAL  
WITH ALL OF THESE INCIDENTS  
AND CHEMICALS**



### First Applied Sorbent Treatment Against Chemical Threats FAST-ACT®

FAST-ACT® is a proprietary formulation of non-toxic high-performance specialty materials effective at neutralizing a wide range of Toxic Industrial Chemicals with the added capability to destroy Chemical Warfare Agents. FAST-ACT® has two proprietary components – Titanium Dioxide (TiO<sub>2</sub>) and Magnesium Oxide (MgO) – both in powder and granule form. Unlike commercially available versions of titanium dioxide and magnesium oxide, these materials are manufactured using unique processes that allow for greatly enhanced physical and chemical properties of the components allowing for broad chemical efficacy.

EFFECTIVENESS AGAINST A BROAD RANGE OF CHEMICAL HAZARDS  
ELIMINATES THE NEED FOR MULTIPLE PRODUCTS.

FAST-ACT® has been tested for efficacy against a wide range of toxic chemicals  
and Chemical Warfare Agents.

<b>ACIDS</b>	Hydrochloric Acid, Hydrofluroric Acid, Nitric Acid, Phosphoric Acid, Sulfuric Acid, Caustic/Acidic gases, Anhydrous Ammonia, Chlorine, Hydrogen Chloride, Nitrogen Dioxide, Sulfur Dioxide
<b>PHOSPHORUS SULFUR COMPOUNDS</b>	2-Chloroethyl ethyl sulfide, Dimethyl methyl phospho- nate, Paraoxon, Parathion, Methyl Mercaptan, Industrial solvents/refrigerants, Acetonitrile, Chloroacetyl Chloride, Acetyl Chloride
<b>CHEMICAL WARFARE AGENTS</b>	Nerve Agents, Blister agents
<b>ORGANIC COMPOUNDS</b>	Acetaldehyde, Acetone, P-Cresol, Diesel, Denatured Ethanol, Ethylene Oxide, Gasoline, Methanol, Toluene, 4-Vinylpyridine

FAST-ACT® is effective against these chemicals and many more.



## TESTED AND EFFECTIVE AGAINST CHEMICAL WARFARE AGENTS AND A WIDE RANGE OF TOXIC INDUSTRIAL CHEMICALS

Chemical Warfare Agents can only be destroyed if their chemical structure is modified.

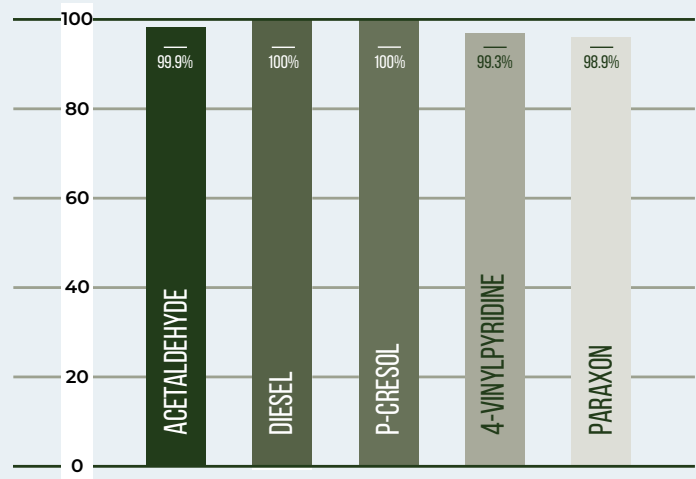
**FAST-ACT**<sup>®</sup> destroys these agents by supporting immediate reactions such as hydrolysis and dehalogenation. Blistering agents are also neutralized by **FAST-ACT**<sup>®</sup> through hydrolysis and dehydrohalogenation reactions.

**FAST-ACT**<sup>®</sup>'s effectiveness against CWAs has been validated by two independent laboratories:

- a. Battelle in Columbus, OH—Surface Decontamination
- b. SBCCOM (ECBC) in Edgewood, MD—Chemical Reactivity.

**FAST-ACT**<sup>®</sup> is proven to remove over 99.6% of VX, GD (soman) and HD (mustard “gas”) from surfaces, thus meeting the applicable NATO standard.

### EFFECTIVENESS OF FAST-ACT<sup>®</sup> TOWARDS LIQUID HAZARDS



Percent neutralized after two minutes

## FAST-ACT TESTED UNDER FIELD CONDITIONS

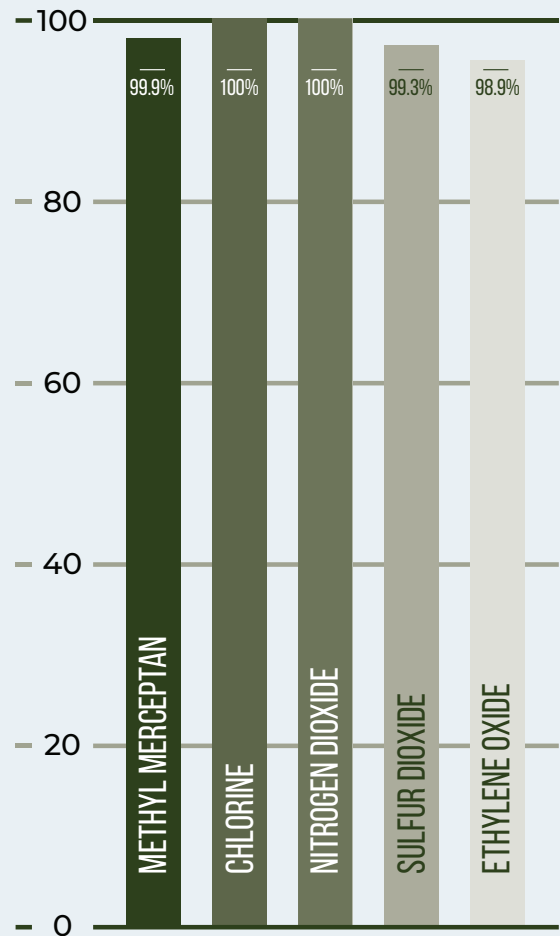
The FAST-ACT® mitts were tested under field conditions and challenged with HD and VX, using them on metal plates contaminated with the equivalent of 10g/cm<sup>2</sup> and 30g/cm<sup>2</sup>. The residual contamination density was always below the NATO permissible limit of 10µg/cm<sup>2</sup> (HD) and 1 µg/cm<sup>2</sup> (VX).

## IN ADDITION TO THE CHEMICAL WARFARE AGENTS, FAST-ACT® WAS FOUND TO DESTROY SIMULANTS OF CHEMICAL WARFARE NERVE, MUSTARD, BLOOD, AND CHOKING AGENTS.

FAST-ACT® is very effective and fast at adsorbing and neutralizing acids with the formation of metal salts. Neutralization of acids upon exposure to FAST-ACT® was determined based on pH measurements after water addition to the treated powder. The formulation has been tested with hydrochloric, nitric, phosphoric, and sulfuric acids. Upon treatment with FAST-ACT®, the pH is brought up to a safe range (from 0 to 9-11) within two minutes of contact.



## EFFECTIVENESS OF FAST-ACT® TOWARDS VAPOR HAZARDS



Percent removed after 2 minutes.



## REMOVAL OF VAPOR HAZARDS

FAST-ACT® was tested for the removal of vapor hazards such as GB (sarin), anhydrous ammonia (USACHPPM Toxic Industrial Chemical List, Second Hand Smoke Component, considered as a choking agent); chlorine (TOP 25 Hazardous Commodities 1998 List, choking agent); ethylene oxide (USACHPPM Toxic Industrial Chemical List), hydrogen chloride (USACHPPM Toxic Industrial Chemical List, also considered a blood agent); nitrogen dioxide (USACHPPM Toxic Industrial Chemical List) and sulfur dioxide (USACHPPM Toxic Industrial Chemical List).



## HOW MUCH FAST-ACT® DO YOU NEED TO NEUTRALIZE SPECIFIC CHEMICALS?

FAST-ACT® is designed to treat a wide variety of military and civilian chemical hazards. Their accidental and incidental releases may be highly concentrated at or near the point of emission.

The concentration, contamination density and type of chemical release will determine how much FAST-ACT® is needed for effective neutralization and/or containment. You always want to apply enough FAST-ACT® to fully adsorb the liquid chemical hazard.

Unlike other decontaminating chemicals, FAST-ACT® can destroy Chemical Warfare Agents at contamination densities that are much higher than the currently required NATO standard.

## BENEFITS OF FAST-ACT®



**NON-TOXIC,  
NON-CORROSIVE  
NON-FLAMMABLE**



**DRY POWDER  
FORMULATION**

The FAST-ACT® formulation is non-flammable and non-corrosive.



**NEUTRALIZES BOTH  
LIQUID AND VAPOR  
HAZARDS**

FAST-ACT® can be delivered to the contaminated area using several methods of deployment. In the event of a liquid spill, the powder can be manually placed onto the even unknown hazards (shaker bottle for small spills, bulk pail for larger spills, or pressurized cylinders for a quick coverage of the entire spill). The pressurized cylinders are designed to treat liquids and vapor hazards, making this technology truly unique and versatile, eliminating the need for ancillary equipment or multiple products.



**SAFE TO APPLY TO  
ALL LIQUID AND  
VAPOR RELEASES**

FAST-ACT® can be safely applied to any chemical hazard. This allows for the utilization of one product when responding to any known or unknown chemical situation.



**EASY TO OPERATE DELIVERY  
SYSTEMS NO SPECIAL TRAINING  
REQUIRED**

Operation of FAST-ACT® units is very simple. The operation of pressurized cylinders is similar to fire extinguishers. Each unit is shipped with a user manual outlining instructions for use and application rates for select chemicals. The formulation is ready for application, which greatly reduces the deployment time.

- No premixing is required
- All units are portable.



**ON-SITE INCIDENT  
MANAGEMENT AND CLEAN-UP  
TIMES ARE REDUCED**

The dry powder neutralizes threats upon contact, FAST-ACT® works quickly to significantly reduce hazards associated with Chemical Warfare Agents and Toxic Industrial Chemicals including acids, acidic/caustic gases, organic compounds, phosphorus and sulfur compounds, and many industrial solvents. By the nature of FAST-ACT®'s innovative chemistry, hazards are chemically bound to the surface of the powder minimizing off-gassing. This facilitates gross and technical decontamination.



## EXTENSIVE TOXICITY TESTING

A rigorous toxicity evaluation of FAST-ACT® components has revealed that there are no safety hazards. Extensive toxicity testing (oral, dermal irritation, dermal sensitization, eye irritation and inhalation) has been carried out on FAST-ACT® and its components by USCHPPM (US Army Center for Health Promotion and Preventive Medicine), Aberdeen MD and MPI Research, Mattawan, MI and proven the formulation to be non-toxic. The formulation is non-corrosive. The results of these tests confirmed the safe use on skin.



## EFFECTIVE OVER A WIDE RANGE OF TEMPERATURES AND ENVIRONMENTAL CONDITIONS

Due to the dry powder nature of the product, the reaction kinetics and adsorption/reaction equilibrium will vary depending on the temperature; however, the reaction mechanism will be the same.



## SKIN DECONTAMINATION

The FAST-ACT® Decontamination Mitt is designated through CE mark (EU) and TGA (Australia) certification as a Class 1 Non-Sterile Medical Device for an applicational dual-use for the immediate/emergency decontamination of chemical warfare agents and toxic industrial materials on skin and surfaces.



## COMPACT CONTAINERS FOR EASY STORAGE

FAST-ACT® units have been designed for easy storage in both vehicles and/or facilities. Accessories are available including wall and vehicle mounts to ensure the units are secure when not in use and still easily accessible when required. FAST-ACT® is offered in 5 different portable sizes (500g to 5 kg units) and has a shelf-life of 5 years.







### AVAILABLE IN 3 DIFFERENT SIZES

Weight and Dimensions vary with sizes.

The **FAST- ACT®** Pressurized Cylinder is a fast-acting, rapid solution for decontamination and adsorption of toxic chemical vapors or liquids in an environment. The **FAST-ACT®** pressurized cylinder is available in 1 kg, 2kg, and 4kg sizes.

**FAST- ACT®** can be safely applied where known or unknown chemicals are a potential threat.

#### Typical Applications Include:

- Hazmat Teams: Air Space decontamination
- Neutralization of acidic gasses
- Emergency decontamination of gear
- Enclosed spaces knowdown of vapors and/or odors
- Decontamination shelter/tent cleanup

REF	PART NUMBER	NSN	CARTON DIMENSIONS	PRODUCT WEIGHT	CYLINDER DIAMETER
1KG	EFAS1	4235-01-612-0947	393 x 159 x 117mm	2.4kg (5.3lbs)	108mm
2KG	EFAS2	4235-01-612-0950	415 x 175 x 175mm	5.0kg (11lbs)	160mm
4KG	EFAS4	4235-01-612-0969	529 x 177 x 177mm	7.7kg (17lbs)	160mm

\*Due to continual product development, descriptions and specifications are subject to change without prior notification and such details must not be used for contractual purposes.

## DECONTAMINATE + CONTAIN + NEUTRALIZE

**No Hazard Identification Required** • Works on Acids, Bases, and Organic and Halogen compounds

- Toxic Industrial Chemicals (TIC's), Toxic Industrial Materials (TIM's) and Chemical Warfare Agents (CWA's)

**Minimal Training Required** • All units are ready-to-use, no premixing or preparation • Easy-to-use

**Fast** • Immediately neutralizes, adsorbs or contains on contact

**Safe** • Non-toxic, non-corrosive, non-flammable, environmentally friendly

### Tested & Verified by



FAST-ACT products are classified as EAR99. Items not designated under the control of another federal agency or listed on the Commodity Control List (CCL). FAST-ACT products are classified as EAR99 (Export Administration Regulations). EAR99 does not require a license and is not categorized under export control regulation.



<b>PART NUMBER</b>	FG015-5000-00NS
<b>NSN</b>	4235-01-612-0981
<b>DIMENSIONS</b>	320mmx320mmx320mm
<b>WEIGHT</b>	7.25Kg (15.95 lbs)
<b>SORBENT LOADING</b>	5Kg (11 lbs)
<b>SHIP DIMENSIONS</b>	13"x13"x13" 21.6 lbs

The FAST- ACT® 5kg Bulk Pail works effectively to neutralize a wide range of acids, adsorbs many halogenated compounds, neutralizes phosphorous compounds, neutralizes and adsorbs both caustic and basic gases, adsorbs a wide range of organic compounds, and adsorbs and neutralizes GD, VX, HD chemical agents and numerous other warfare stimulants.

FAST- ACT® can be safely applied where known or unknown chemicals are a potential threat.

**Typical Applications Include:**

- Hazmat Teams: Spill Response and Containment
- Sorbent in a decon line shuffle pit
- Rapid covering of surface with decon powder
- Neutralization of unknown chemical mixtures
- Industrial & Commercial Facilities: Accidents, Leaky Storage

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## DECONTAMINATE + CONTAIN + NEUTRALIZE

**No Hazard Identification Required** • Works on Acids, Bases, and Organic and Halogen compounds  
 • Toxic Industrial Chemicals (TIC's) & Toxic Industrial Materials (TIM's)

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**FAST-ACT Decon Wipes remove chemical and radiological contaminants from skin, equipment and surfaces**



\*CE pending

<b>MADE OF</b>	100% rayon
<b>DIMENSIONS OF WIPE</b>	25.4x30.5 cm
<b>INDIVIDUALLY PACKAGED</b>	Cases of 300
<b>PACKET SIZE</b>	10 x 12.7 cm
<b>USAGE TEMPERATURE:</b>	0°C / +70°C
<b>SHELF LIFE:</b> (in original packaging)	5 years

## HOW TO USE

- 1- Open the bag and remove a wipe without unfolding it.
- 2- Methodically scrub the contaminated surfaces, folding the wipe over regularly.
- 3- Rinse with clean water if possible.

### Safety Precautions:

- Follow proper handling procedures for chemical and radiological substances.
- Use appropriate personal protective equipment (PPE) when handling hazardous materials.
- Dispose of used wipes according to local regulations and procedures.

Note: Detailed test reports and technical data are available upon request.

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The FAST-ACT Decontamination Wipes are an innovative solution for the decontamination of chemical and radiological substances. These wipes offer a convenient and effective way to remove trace contaminants on skin and various surfaces, providing a safer environment for personnel.

### Product Features:

- Decontaminate and contain and chemical and radiological hazards
- Neutralize trace chemicals
- Designed for use on hard surfaces in a variety of settings
- Impregnated with patented FAST-ACT technology for efficient decontamination
- Viscose non-woven wipe composition for effective cleaning action
- Classified as a Medical Device Class I in the EU for skin decontamination

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\*\* Incinerable according to current procedures



<b>PART NUMBER</b>	FG015-1840-00NS (EA)
<b>NSN</b>	4235-01-612-0990
<b>PACKET DIMENSIONS</b>	9.5" x 5.5" x <0.5"
<b>PACKED IN CASES OF</b>	80 mitts
<b>CASE DIMENSIONS</b>	16" x 12" x 9"
<b>CASE WEIGHT</b>	10.5 lbs

**CE** Class I non-sterile medical device for dual-use application

The FAST- ACT® Individual Decontamination Mitt contains FAST- ACT® powder in a pad with a polyethylene backing that can be used to decontaminate a wide variety of chemical agents from various surfaces. FAST- ACT® is a rapid and effective way to safely neutralize toxic releases efficiently reducing life-safety threat, equipment, and cost.

The FAST- ACT® Decontamination Mitt is designated through CE mark as a Class 1 Non-Sterile Medical Device for an applicational dual-use for the decontamination of chemical warfare agents and toxic industrial materials on surfaces and skin.

### Typical Applications Include:

- Hazmat Teams: Gear Cleaning
- Military Special Forces: Tactical Equipment Rapid Decon
- Emergency Surface Decontamination: Small Scale Containment
- Decon Lines
- Cleanup of unknown Hazards
- Skin decontamination"

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## DECONTAMINATE + CONTAIN + NEUTRALIZE

**No Hazard Identification Required** • Works on Acids, Bases, and Organic and Halogen compounds  
• Toxic Industrial Chemicals (TIC's) & Toxic Industrial Materials (TIM's)

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The FAST- ACT® Powder Bottle Pack works quickly to significantly reduce hazards associated with common industrial chemicals including; acids, acidic/caustic gases, organic compounds, phosphorous and sulfur compounds, and many industrial solvents. By the nature of FAST- ACT®'s innovative chemistry, hazards are chemically bound to the surface of the powder minimizing off-gassing.

FAST- ACT® can be safely applied where known or unknown chemicals are a potential threat.

**Typical Applications Include:**

- Surface decontamination
- Chemical decontamination of small and intricate items
- Gear cleanup
- In combination with the FAST-ACT Microfiber\ Towel Pack or Decon Mitt

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## DECONTAMINATE + CONTAIN + NEUTRALIZE

**No Hazard Identification Required** • Works on Acids, Bases, and Organic and Halogen compounds  
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<b>PART NUMBER</b>	FG015-05500-00NS
<b>NSN</b>	4235-01-612-0942
<b>PACKET DIMENSIONS</b>	89 x 89 x 178 (mm)
<b>WEIGHT</b>	0.61 kg
<b>SORBENT LOADING</b>	500 grams
<b>SHIP DIMENSIONS</b>	4" x 4" x 8" - 1.5 lbs

The FAST- ACT® 500 gram Shaker Bottle is ideal for contamination and adsorption of known and unknown liquid chemical threats that you may become exposed to in an environment. Ideal for use in laboratories, on-the field hazmat and emergency response calls, and small scale chemical containment.

FAST- ACT® can be safely applied where known or unknown chemicals are a potential threat.

### Typical Applications Include:

- Hazmat Teams: Small Scale Spill Response
- Fine decon in conjunctions with FAST- ACT® Mitts
- Emergency on site containment for First Responders: Fire, Police
- Laboratories: Schools, Universities, Hospitals, Commercial
- Personal equipment: Containment and neutralization of contamination

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<b>PART NUMBER</b>	FG015-0001-00NA
<b>PACKET DIMENSIONS</b>	7.5" x 4.5" x 3"
<b>NUMBER PER CASE</b>	12

The FAST- ACT® Microfiber Towel Pack contains two microfiber towels. The green towel is used for absorbing the excess liquid chemical from the surface first, then the other towel contains the FAST- ACT® powder will be used to conduct an effective surface chemical decontamination.

FAST- ACT® can be safely applied where known or unknown chemicals are a potential threat.

### Typical Applications Include:

- Surface decontamination
- Chemical decontamination of small and intricate items
- Gear & Equipment Cleanup

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## DECONTAMINATE + CONTAIN + NEUTRALIZE

**No Hazard Identification Required** • Works on Acids, Bases, and Organic and Halogen compounds  
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