

MATERIAL SAFETY DATA SHEET

MIL- PRF-23377J Type I Class C Low VOC Epoxy Primer  
Contains Spectrum Low VOC Epoxy Primer Component B

07/27/2011

**PRODUCT NAME:** MIL-P-23377J & MIL-PRF-23377J  
Type I Class C Component B Epoxy Primer  
**HMS CODES:** H F R P  
2 3 1

----- **SECTION I - MANUFACTURER IDENTIFICATION** -----

**MANUFACTURER'S NAME :** MILSPRAY Military Technologies  
**ADDRESS :** 845 Towbin Ave  
Lakewood, NJ 08701



**EMERGENCY PHONE:** CHEMTREC - 1-800-424-9300

**REVISION DATE:** 07/27/2011

**INFORMATION PHONE:** 732-886-2223

**Name of Preparer:** MILSPRAY Military Technologies

----- **SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION** -----

CHEMICAL NAME / CAS No.	WEIGHT	VAPOR PRESSURE	OSHA	ACGIH
	PERCENT	<u>mm Hg@Temp</u>	Exposure Limits	Exposure Limits
<b>Phenylmethyl Alcohol</b> 100-51-6 Other Exposure Limit : PEL 25ppm - TWA	10-20%	0.4 mmHg@68 F		
<b>Toluol</b> 108-88-3	5-10%	22 mmHg@68 F	PEL 200ppm - TWA PEL 300ppm - Ceiling VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 50ppm - TWA (skin) TLV 150ppm - STEL (skin)
<b>Xylol</b> 1330-20-7 Other Exposure Limit : 46ppm TWA	5-10%	9 mmHg@68F	PEL 100ppm - TWA VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 100ppm - TWA TLV 150ppm - STEL
<b>4-Methyl, 2-Pentanone</b> 108-10-1	1-5%	16 mmHg@68F	PEL 100ppm - TWA VPEL 50ppm - TWA VPEL 75ppm - STEL	TLV 50ppm - TWA TLV 75ppm - STEL
<b>Propylene Glycol Monomethyl Ether Acetate</b> 108-65-6	1-5%	3.7 mmHg@68F	Not Established	Not Established
<b>1,2-Ethanediamine, n-(2-aminoethyl)</b> 111-40-0	1-5%	0.14 mmHG@68F		PEL 1mg/m3 - TWA

\* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

Warning: Detectable amounts of a chemical known to the state of California to cause cancer and/or birth defects or other reproductive harm may be present in this product.

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### ----- SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS -----

This mixture typically exhibits the following properties under normal circumstances.

Appearance: **Viscous liquid either colored or clear depending on product.**

Odor: **Strong solvent odor.**

Physical State: **Liquid**

Vapor Density: **Heavier than air.**

Evaporation Rate: **Slower than ether.**

Boiling Range: **108 to 209 C**

% Volume Volatile: **44.57**

Specific Gravity (SG): **0.968**

Formula Lb / Gal: **8.08**

Lbs VOC/Gallon Less Water: **2.92**

gms VOC/Liter Less Water: **620**

### ----- SECTION IV - FIRE AND EXPLOSION HAZARD DATA -----

Flash Point: 22 C (72 F)

Autoignition: Will not occur.

FLAMMABLE LIMITS IN AIR BY VOLUME: UPPER: 10.5 %

FLAMMABLE LIMITS IN AIR BY VOLUME: Lower : 1%

Extinguishing Media: Use foam, Carbon Dioxide, or Dry Chemical fire fighting apparatus.

#### EMERGENCY FIRST AID MEASURES

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Eye Contact: If symptoms develop, move individual away from exposure, and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or if there is any visual difficulty, seek immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Note to Physician: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (ie; asthma-like conditions), skin (redness or rash-like symptoms, irritation)

#### SPECIAL FIREFIGHTING PROCEDURES:

Treat all fires as chemical in nature. The use of water may be unsuitable as an extinguishing Media, but will be helpful in keeping adjacent containers cool. Avoid spreading burning liquid with water used for cooling purposes.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited but heat, pilot lights other flames, or other ignition sources at locations distant from material handling area. Never use welding or cutting torch on or near containers even when empty, as product and/or product residue can ignite explosively.

#### FIRE FIGHTING EQUIPMENT:

wear full turnout gear or Level A equipment, including positive-pressure, self-contained breathing apparatus(SCBA) and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

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## ----- SECTION V - REACTIVITY DATA -----

Components of this mixture may be incompatible with various materials, and will fume certain combustion products. It is recommended that only MILSPRAY's authorized materials are combined with MILSPRAY's finished products.

The following incompatibilities may exist with components of this product.

Strong oxidizing agents

Alkali metals, aluminum, Halogens, lead, strong mineral acids, strong oxidizing agents.

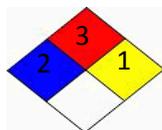
Mineral acids and strong oxidizers

Strong oxidizing agents, acids, and alkali/base/caustic solutions, and heat.

Thermal decomposition in the presence of air may yield the following; Oxides of carbon, such as carbon dioxide and

Oxides of carbon, such as carbon dioxide and carbon monoxide.

## ----- SECTION VI - HEALTH HAZARD DATA -----



CORROSIVE

HMIS Rating: 2 - 3 - 1

Primary Routes of Entry:

Inhalation, Skin Contact, Eye Contact, Ingestion

Target Organs:

Blood, Eyes, Kidneys, Liver, Lungs, Nervous System, Skin

Effects of Overexposure, MIL-P-23377J Type I Class C, Low VOC Epoxy Primer Part B:

Eye Contact: Causes eye burns. May cause blindness, and or severe eye irritation. Can cause eye irritation.

Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin Contact: Harmful in contact with skin. Causes skin burns. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling use. Harmful in contact with skin. Causes skin burns.

Ingestion: Swallowing small amounts of this material during normal handling is not material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during lungs during swallowing or vomiting. This results in lung inflammation and other lung injury. Harmful if swallowed, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Inhalation: Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation. Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects.

Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.

Symptoms of Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: mouth and throat irritation, stomach or intestinal upset, irritation of the nose, throat & airways, central nervous system depression, high blood sugar, coma.

Target Organ Effects: This material shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Overexposure to this material has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, blood abnormalities. No Data

Cancer Information: Based on the available information, this material cannot be classified with regard to carcinogenicity. This material is NOT listed as a carcinogen by the International agency for research on Cancer, the National Toxicology Program, or the Occupational safety and Health Administration. Some isomers of Xylene may contain Ethylbenzene which has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. IARC has classified Ethylbenzene as a possible carcinogen.

Developmental Info.: This material (or a component) may be harmful to the human fetus based on positive

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test results with laboratory animals. Case studies show that prolonged intentional abuse of this product during pregnancy can cause birth defects in humans.

Carcinogenicity: The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing).

-NONE

### ----- SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE -----

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Evacuate nonessential personnel. Remove all sources of ignition. Ventilate area. Notify appropriate authorities if necessary. Cleanup personnel should wear appropriate personal protective equipment. Dike or impound spilled material and control further spillage if feasible. Do not allow material to leak into surface water supplies, sewers, or ground water. Cover the spill with sawdust, vermiculite, Fuller's earth or other absorbent material. Pour decontamination solution over the spill area and allow to react for at least 10 minutes. Collect material in open containers and add further amounts of decontamination solution. Remove container to a safe place, cover loosely and allow to stand 24 to 48 hours. Dispose of material in accordance with all local, state and federal regulations.

SPILL SUPERVISOR - Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

SMALL SPILLS: Ventilate area, and keep sources of ignition and hot metal surfaces isolated from the spill. Absorb liquid using vermiculite, sawdust, speedy-dry, or other suitable floor absorbent material. Use only non-sparking tools to collect and transfer to a suitable container for disposal in accordance with local, and federal regulations.

LARGE SPILLS: Eliminate all ignition sources, and ventilate area. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, and prevent material from entering drains, sewers, streams or other bodies of water. Dike spill area with suitable absorbent material or chemical booms to limit spreading. If run-off occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product, and transfer contaminated absorbent, soil and other materials to containers for disposal in accordance with local, state, and federal regulations. Note; use only non-sparking equipment to clean up spills.

#### WASTE DISPOSAL METHOD

Dispose material in accordance with all local, state, and federal regulations.

#### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Handling Precautions: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers dry and closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Sufficiently ground container when transferring material from one container to another.

Emergency eyewash fountains and safety showers should be available in the immediate vicinity of potential exposure. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperatures and pressures, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Any use of this product in elevated temperature, pressurized, or vacuum process should be thoroughly evaluated to establish and maintain safe operating conditions.

Storage Information: Store this material in tightly sealed original containers only, in a segregated area with adequate ventilation to prevent a build-up of "fumes" that could pose a safety hazard with regard to personal exposure and fire. Keep all sources of ignition away from storage area, and store material at temperatures between 50 to 80 degrees F.

### ----- SECTION VIII - CONTROL MEASURES -----

#### RESPIRATORY PROTECTION

If workplace exposure limits of product or any component is exceeded, the use of a NIOSH/MSHA respirator will be necessary. In general the use of an organic vapor cartridge with a dust/mist pre-filter will be sufficient. In the absence

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of proper environmental controls, a NIOSH/MSHA approved air supplied respirator is advised.

VENTILATION

General mechanical ventilation may be sufficient to keep product vapor concentrations within specified time-weighted averages. If general ventilation proves inadequate to maintain safe vapor concentrations, supplemental local exhaust may be required.

PROTECTIVE GLOVES

Permeation resistant gloves (butyl rubber, nitrile rubber) should be used. Based on laboratory assessment tests it is recommended that latex gloves not be worn when working with isocyanates.

EYE PROTECTION

The use of safety glasses, chemical goggles, and/or face shields are recommended to safeguard against potential eye contact, irritation, or injury. The availability of eye wash stations when using this product is highly recommended.

ENGINEERING CONTROLS

Ensure that any processing ovens are vented to prevent the introduction of fumes into the workplace, and to prevent a build up of fume within the oven. Use only explosion proof equipment, and ground containers and transfer equipment. Use only chemically resistant transfer equipment, and measuring containers.

WORK/HYGIENIC PRACTICES

Wash hands before eating, smoking, or using restroom.

----- SECTION IX ADDITIONAL INFORMATION -----

Toxicological Information

Phenylmethyl Alcohol	Toluol	Xylol
LC 50: No data found	LC 50: No data found	LC 50: No data found
LD 50: No data found	LD 50: No data found	LD 50: No data found
4-Methyl, 2-Pentanone	Propylene Glycol Monomethyl Ether Acetate	
LC 50: No data found	LC 50: No data found	
LD 50: No data found	LD 50: No data found	

1,2-Ethanediamine, n-(2-aminoethyl)

LC 50: No data found

LD 50: No data found

Ecological Information

Phenylmethyl Alcohol	Toluol	Xylol
No data found	No data found	No data found
4-Methyl, 2-Pentanone	1,2-Ethanediamine, n-(2-aminoethyl)	
No data found	No data found	
Propylene Glycol Monomethyl Ether Acetate		
No data found		

Waste Disposal Considerations

As the US EPA, state, regional, and other regulatory agencies may have jurisdiction over the disposal of your facility's hazardous waste, it is incumbent upon you, the hazardous waste generator, to learn of and satisfy all the requirements which affect you. Dispose of the hazardous waste at a properly licensed and permitted disposal site or facility. Ensure conformity to all applicable hazardous waste disposal regulations.

The US EPA Hazardous Waste Numbers which follow are applicable to this unadulterated product if the product enters the "waste stream." Refer to Title 40 of the Code of Federal Regulations, Part 261 (40 CFR 261). This part of the Code identifies solid wastes which are subject to regulation under various sections of the Code and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA).

No data found

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Transportation Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>Hazard Class</u>	<u>Packing Group</u>	<u>UN Number</u>
DOT	Paint: Flammable Liquid	3	II	1263

Regulatory Information

Other regulatory information is listed where applicable.

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

-None

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

108-10-14-Methyl, 2-Pentanone 1.0 - 5%

1330-20-7 Xylol 5 - 10%

108-88-3Toluol 5 - 10%

User should consult OSHA and other applicable safety laws and regulations before use.

----- **SECTION X - DISCLAIMER** -----

The foregoing data has been compiled from sources which the company, in good faith, believes to be dependable and is accurate and reliable to the best of our knowledge and belief. However, the company cannot make any warranty or representation respecting the accuracy or completeness of the data and assumes no responsibility for any liability or damages relating thereto or for advising you regarding the protection of your employees, customers, or others. User should consult OSHA and other applicable safety laws and regulations before use.