

Safety Data Sheet

MILSPRAY MIL-P-23377K/MIL-PRF-23377J Type I Class C Epoxy Primer Component A
Revision Date: June 8, 2015

Contains Spectrum Low VOC Epoxy Primer Type I Class C Component A

Section 1 - Manufacturer Identification

Product Name: MIL-P-23377K/MIL-PRF-23377J
Type I Class C Epoxy Primer
Component A

MILSPRAY

Military Technologies

Recommend Use: Touch-Up Military Paint

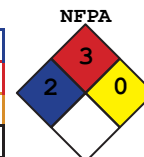
Supplier's Name: MILSPRAY Military
Technologies

Address: 845 Towbin Ave
Lakewood, NJ 08701

Phone: 732-886-2223

EMERGENCY PHONE: 1-800-424-9300 (Chemtrec)

HMIS	
Health	2
Flammability	3
Physical Hazard	0
Personal Protection	J



Section 2 - Hazards Identification

GHS Ratings:

Flammable Liquid	2
Skin Corrosion	2
Eye Corrosion	2A
Skin Sensitizer	1
Reproductive toxin	1B
Organ Toxin	
Repeated Exposure	2
Aspiration hazard	1



GHS Signal Word: Danger

GHS Hazards:

Highly flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
May cause cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure

GHS Precautions

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces - No smoking
Keep container tightly closed
Ground container and receiving equipment
Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Avoid breathing dust/fume/mist/spray
Wash thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves, clothing, eye protection and face protection

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Use personal protective equipment as required

Get Medical advice if you feel unwell

Take off contaminated clothing and wash before reuse

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

IF ON SKIN: Wash with soap and water

IF ON SKIN (or hair): Remove immediately all contaminated clothing.
Rinse skin with water

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

IF exposed or concerned: Get medical advice

If skin irritation or a rash occurs: Get medical attention

In case of fire: Use foam, Carbon Dioxide, or Dry Chemical for extinguishing

Store locked up

Store in a well ventilated place. Keep cool

Dispose of contents/container in accordance with all applicable regulations

Section 3 - Composition/Information on Ingredients

Product Name	CAS #	% by weight
Bisphenol-A Epichlorohydrin	25068-38-6	30 to 40%
Strontium Chromate	7789-06-2	10 to 20%
Calcium Magnesium Silicate	14807-96-6	10 to 20%
Toluol	108-88-3	5 to 10%
Xylol	1330-20-7	5 to 10%
Amorphous Silica	63231-67-4	5 to 10%
Titanium Dioxide	13463-67-7	1 to 5%
Amorphous Silica	61790-53-2	1 to 5%
4-Methyl, 2-Pentanone	108-10-1	1 to 5%
Propylene Glycol Monomethyl Ether Acetate	108-65-6	1 to 5%
Urea P/W Formaldehyde, Isobutylated	68002-18-6	1 to 5%
Barium chromate	10294-40-3	0.1 to 1.0%

Section 4 - First Aid Measures

EYE CONTACT: 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.

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.

INGESTION: Seek medical attention. If individual is drowsy or unconscious, do not

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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)

Section 5 - Fire Fighting Measures

FLASH POINT: 7C (45F)

LEL: 1.00

UEL: 8.00

SUITABLE EXTINGUISHING MEDIA: Use foam, Carbon Dioxide, or Dry Chemical fire fighting apparatus.

UNSUITABLE EXTINGUISHING MEDIA: Not available.

UNUSUAL FIRE & EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by 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.

PRODUCTS OF COMBUSTION: May form oxides of carbon, and nitrogen.

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

FIRE FIGHTING EQUIPMENT: Firemen and emergency responders: 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 SDS.

Section 6 - Accidental Release Measures

PERSONAL PRECAUTIONS: Not available.

SPILL AND LEAK PROCEDURES: 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.

ENVIRONMENTAL PRECAUTIONS: Stop spill at source, and prevent material from entering drains, sewers, streams or other bodies of water.

METHODS OF CONTAINMENT: Dike spill area with suitable absorbent material or chemical booms to limit spreading.

METHODS OF CLEAN-UP:

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

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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.

OTHER INFORMATION: Not available.

Section 7 - Handling and Storage

HANDLING: 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: 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 8 - Exposure Controls/Personal Protection

Product Name	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Bisphenol-A Epichlorohydrin	OELs not established	OELs not established	
Strontium Chromate	OELs not established	TLV 0.0005 mg/m ³ - TWA	
Calcium Magnesium Silicate	PEL - 20 mppcf - TWA (if 1% Quartz or more, use Quartz limit) VPEL- 2 mg/m ³ - TWA (respirable dust)	TLV 2 mg/m ³ - TWA (respirable fraction)	
Toluol	PEL 200ppm - TWA PEL 300ppm - Ceiling VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 20ppm - TWA	
Xylol	PEL 100ppm - TWA VPEL 100ppm - TWA VPEL 150ppm - STEL	TLV 100ppm - TWA TLV 150ppm - STEL	46ppm TWA
Amorphous Silica	OELs not established	OELs not established	

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Titanium Dioxide	PEL 15mg/m ³ - TWA (total dust)	TLV 10mg/m ³ - TWA (total dust)	
Amorphous Silica	PEL 20 mppcf TWA PEL (80)/(% SiO ₂) mg/m ³ TWA VPEL 6 mg/m ³ - TWA	OELs not established	
4-Methyl, 2-Pentanone	PEL 100ppm - TWA VPEL 50ppm - TWA VPEL 75ppm - STEL	TLV 20ppm - TWA TLV 75ppm - STEL	
Propylene Glycol Monomethyl Ether Acetate	OELs not established	OELs not established	
Urea P/W Formaldehyde, Isobutylated	OELs not established		OELs not established
Barium chromate	OELs not established	OELs not established	

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.

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.

SKIN PROTECTION: The use of chemical resistant gloves is recommended to prevent repeated or prolonged contact with the skin. Wear impervious clothing and boots. The use of chemical aprons is advised when working with and/or transferring these materials. The availability of safety showers in work areas is recommended.

RECOMMENDED 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.

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

CONTAMINATED EQUIPMENT: Dispose of the waste in compliance with all Federal, state, regional, and local regulations.

HYGIENE: Not available.

Section 9 - Physical and Chemical Properties

APPEARANCE: Viscous liquid either colored or clear depending on product.

ODOR: Strong solvent odor

ODOR THRESHOLD: Not available.

PHYSICAL STATE: Liquid

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% Volume Volatile: 36.12
Formula Lb/Gal: 12.10
Boiling Range: 108 to 150°C
EVAPORATION RATE: Slower than ether.
pH: Not available.
MELTING POINT/FREEZING POINT: Not available.
FLASH POINT: 7°C (45°F)
FLAMMABILITY: Not available.
UPPER/LOWER LIMITS FLAMMABILITY: 8.00/1.00
VAPOR PRESSURE: Not available.
RELATIVE DENSITY: 1.450
SOLUBILITY: Not available.
PARTITION COEFFICIENT: Not available.
AUTO-IGNITION TEMPERATURE: Not available.
DECOMPOSITION TEMPERATURE: Not available.
VISCOSITY: Not available.
VAPOR DENSITY: Heavier than air.
Lbs VOC/Gallon Less Water: 2.62
Gms VOC/Liter Less Water: 314

Section 10 - Stability and Reactivity

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

STABILITY: Stable.

CONDITIONS TO AVOID: Not available.

INCOMPATIBLE MATERIALS: 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 inorganic acids, Caustics, and strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition in the presence of air may yield the following: Oxides of carbon, such as carbon dioxide & carbon monoxide. Material will ash when exposed to extremely high temperatures and flame.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

Section 11 - Toxicological Information

LIKELY ROUTES OF EXPOSURE: Eye contact, Skin contact, Ingestion, and Inhalation

EYE: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Temporary irritation. Not a primary eye irritant, mechanical irritation only.

INHALATION: 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. This product contains crystalline silica, which is considered a hazard by inhalation as a

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respirable dust only. IARC has classified inhalation of crystalline silica as carcinogenic for humans (group I). Inhalation of crystalline silica is also a known cause of silicosis, a noncancerous lung disease. Inhalation of high concentrations may cause mechanical irritation and discomfort. Repeated overexposure can cause chronic effects. These effects are only from talc dust itself as an airborne particle. Epidemiological studies indicate that long term exposure to high level dust and mist from chromate compounds is associated with increase in respiratory tract cancer in humans. The causative agent is not known. Prolonged inhalation may cause liver damage.

SKIN: 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 and use. Not a skin irritant. Not a primary skin irritant, not absorbed through skin.

Ingestion: Swallowing small amounts of this 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 swallowing or vomiting. This results in lung inflammation and other lung injury. Not hazardous when ingested. Unlikely to be toxic by ingestion. Toxic and may be harmful if swallowed; may produce liver or kidney damage. Can cause tissue destruction, hemorrhage changes in the gastrointestinal tract, bleeding, and pathological lesions in the kidneys.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: 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. Prolonged exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or of the covering of the lungs (pleural thickening). Pneumoconiosis may produce symptoms of cough or shortness of breath. Pleural thickening usually produces no symptoms. Conditions can be determined by chest radiographic examination and pulmonary function test (FEV & FVC). Bronchial irritation may cause sputum production.

TARGET ORGANS: Blood, Eyes, Kidneys, Liver, Lungs, Central Nervous System, and Skin. 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. Talc may contain trace amounts of quartz (crystalline silica). Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. "Inhalable" crystalline silica is listed by IARC as a Group I carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a substance reasonably anticipated to be a carcinogen. Some human studies have not demonstrated a cancer association and considerable controversy exists.

This talc has been tested as a whole and in parts in several animal studies with no carcinogenic association demonstrated. Epidemiologic studies in humans have been interpreted in conflicting ways with no clear evidence of an increased risk in lung tumors in association with exposure. Human, animal and in-vitro tests of basic product ingredients do not show a carcinogenic effect. All talc is of the non-asbestos form.

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Note: These effects and tests have only been as a result of the raw respirable dust, and not when incorporated as a component of another material.

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) .

CAS Number-10294-40-3; Description- Barium Chromate; % Weight-0.1-1%; Carcinogen Rating-N/A

CAS Number-7789-06-2; Description- Strontium Chromate; % Weight-10-20%; Carcinogen Rating- No specific references. Suspect cancer hazard as a chromate compound.

DEVELOPMENTAL INFORMATION: This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of this product during pregnancy can cause birth defects in humans.

MIXTURE TOXICITY: Inhalation Toxicity LC50: 103mg/L

COMPONENT TOXICITY:

Toluol 108-88-3

Oral LD50: 636 mg/kg (Rat)

4-Methyl, 2-Pentanone

Oral LD50: 2,080 mg/kg (Rat)

Propylene Glycol Monomethyl Ether Acetate 108-65-6

Dermal LD50: 5 g/kg (Rabbit)

Urea P/W Formaldehyde, Isobutylated, 68002-18-6

Oral LD50: 2,000 mg/kg (Rat)

Dermal LD50: 2,000 mg/kg (Rabbit)

Inhalation LC50: 8 mg/L (Rat)

Section 12 - Ecological Information

ENVIRONMENTAL EFFECTS: Not available.

Section 13 - 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) .

Section 14 - Transport Information

DOMESTIC (USDOT):

Proper Shipping Name: Paint; Flammable Liquid

Hazard Class: 3

Packing Group: II

UN Number: UN1263

Section 15 - Regulatory Information

Other regulatory information is listed where applicable.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986

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(Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

108-10-1 4-Methyl, 2-Pentanone 1 to 5 %

13463-67-7 Titanium Dioxide 1 to 5 %

108-88-3 Toluene 5 to 10 %

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

4-Methyl, 2-Pentanone 1 to 5 %

Titanium Dioxide 1 to 5 %

Amorphous Silica 5 to 10 %

Xylene (mixed) 5 to 10 %

Toluene 5 to 10 %

Calcium Magnesium Silicate Hydrate 10 to 20 %

Strontium Chromate 10 to 20 %

New Jersey Worker and Community Right To Know Hazardous Substance List: The following substances appear on the New Jersey Right To Know Hazardous Substance List:

4-Methyl, 2-Pentanone 1 to 5 %

Amorphous Silica 1 to 5 %

Titanium Dioxide 1 to 5 %

Xylene (mixed) 5 to 10 %

Toluene 5 to 10 %

Calcium Magnesium Silicate Hydrate 10 to 20 %

Strontium Chromate 10 to 20 %

Commonwealth of Pennsylvania Worker and Community Right-To-Know Act: This product contains the following chemicals which appear on the Pennsylvania Hazardous Substance List:

108-10-1

13463-67-7

63231-67-4

1330-20-7

108-88-3

14807-96-6

7789-06-2

EU Risk Phrases

None.

Safety Phrase:

None.

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

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reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.

108-10-1 4-Methyl, 2-Pentanone 1.0 - 5%

1330-20-7 Xylol 5 - 10%

108-88-3 Toluol 5 - 10%

7789-06-2 Strontium Chromate 10 - 20%

Section 16 - Other Information

HMIS: Health = 2 Flammability = 3 Physical Hazard = 0 Personal Protection = J

NFPA 704: Health = 2 Flammability = 3 Instability = 0

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	J

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

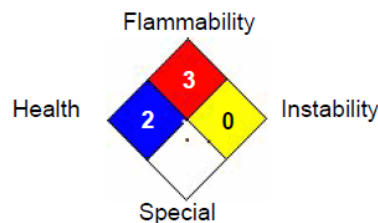
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



DISCLAIMER:

This SDS is based on information believed to be reliable and accurate. Because of changing reporting requirements and other variables it is impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to determine proper personal protection based on the actual condition of use and to comply with all Federal, State and Local laws and regulations.

Revision History

6/08/2015 - Original SDS version; approval JH