NFPA

Safety Data Sheet

MILSPRAY Tough Coat[™] Part B Revision Date: June 23, 2015

Sect	lon I - Manufacturer	Identificat	ЪС)n
Product Name:	Tough Coat™ Part B	MILSP) F	2
Recommend Use:	Touch-Up Military Paint	Military Techno	ologi	es
Supplier's Name:	MILSPRAY Military Technologies			
Address:	845 Towbin Ave	HMIS		
	Lakewood, NJ 08701	Health	3	
Phone:	732-886-2223	Flammability	1	
		Physical Hazard	0	
EMERGENCY PHONE:	1-800-424-9300 (Chemtrec)	Personal Protection		

Section 2 - Hazards Identification

GHS Ratings: Not available.

GHS Signal Word: Danger

GHS Hazards:

Causes skin irritation Harmful if swallowed Harmful if inhaled Causes eye irritation



GHS Precautions

Do not breathe dust/fume/gas/mist vapors/spray.

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Section 3 - Composition/Information on Ingredients

Component	CAS Number	<pre>% by weight</pre>
Polyoxypropylenediamine	9046-10-0	50-90
Diethylmethylbenzenediamine	68479-98-1	20-40
Polyetheramine	64852-22-8	10-30

Section 4 - First Aid Measures

EYE CONTACT: Causes eye irritation. Wear eye protection/face protection. Do not breathe dust/fumes/gas/mist/vapors/spray. Wash hands thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, seek medical attention/advice.

SKIN CONTACT: Causes skin irritation. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse SKIN with water/shower. If irritation persists, seek medical attention/advice.

INHALATION: Harmful if inhaled. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist vapors/spray. IF INHALED: Remove victim to fresh air and keep at rest in position comfortable for breathing. IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. If any symptoms persist, or if any

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measures do not relieve the condition, seek medical help.

INGESTION: Harmful if swallowed. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical attention immediately.

NOTE TO PHYSICIAN: Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.

PROTECTION OF FIRST-AIDERS: Not available.

Section 5 - Fire Fighting Measures

FLASH POINT: >364°F (185°C)

HAZARDS WHEN ON FIRE OR NEAR FLAME: May produce toxic fumes of Carbon Dioxide, Carbon Monoxide, and/or Nitrogen Oxides when near heat source/flame. When in a closed container, pressure will increase which may lead to a rupture of the container.

SUITABLE EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray or regular foam. For larger fires, use water spray, fog, or regular foam. Use an extinguishing agent suitable for the surrounding fire.

UNSUITABLE EXTINGUISHING MEDIA: None known.

UNUSUAL FIRE & EXPLOSION HAZARDS: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. If in a fire or heated, a pressure increase will occur and the container may burst.

PRODUCTS OF COMBUSTION: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, halogenated compounds and/or metal oxide/oxides.

PROTECTION OF FIREFIGHTERS AND FIRE FIGHTING EQUIPMENT: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet, and protective clothing should be worn.

Section 6 - Accidental Release Measures

PERSONAL PRECAUTIONS: Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.

ENVIRONMENTAL PRECAUTIONS: This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources of ignition should be kept clear.

METHODS OF CONTAINMENT: Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand. DO NOT USE combustible materials such as sawdust).Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillages with decontaminant. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release is reportable.

METHODS FOR CLEAN-UP: Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without

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posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION for recommended (PPE) Personal Protective Equipment. Obey all local, state, and federal regulations during clean up.

OTHER INFORMATION: Not available.

Section 7 - Handling and Storage

HANDLING: Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded, use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSTURE CONTROL/PERSONAL PROTECTION for details). Do not ingest. Keep stocks of decontaminate readily available. Eating, drinking and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems, asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

STORAGE: Keep containers properly sealed and when stored indoors, in a dry and well-ventilated area. Keep contents away from moisture. Due to reaction with water, producing CO2 gas, a hazardous build-up of pressure could result if contaminated containers are resealed. DO NOT reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed and stored after purging the container with nitrogen gas. DO NOT store in containers made of copper, copper alloys, or galvanized surfaces.

OTHER INFORMATION: Ideal storage temperature is $60\degree F - 90\degree F$ (15C° - 32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.

Section 8 - Exposure Controls/Personal Protection

EXPOSURE LIMITS: As of the latest revision of this document, no known exposure limits exist for this product. The absence of current exposure data does not relieve an employer, user, or other to determine the specific hazards and appropriate exposure protection measures in the application and use of this product. Personal, workplace, atmospheric, and/or biological monitoring may be required to determine the effectiveness of engineering, administrative, and/or other best practice control measures. These monitoring results determine the need for and type of respiratory protective equipment, if any. Refer to the appropriate local, state, and federal regulations and statutes for the most current information and for guidance in the determination of hazardous conditions and the correlating personal protective equipment.

ENGINEERING CONTROLS: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

ENVIRONMENTAL EXPOSURE CONTROLS: Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

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EYE PROTECTION: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist or dusts. If contact is possible, the following protection shall be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required.

SKIN PROTECTION: Personal protective equipment for the body should be selected based on the task being performed; the risks involved, and should be approved by an industrial hygiene specialist before handling this product.

HNAD PROTECTION: Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.

RECOMMENDED VENTILATION: Not available.

RESPIRATORY PROTECTION: Ensure adequate ventilation. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator. Ensure the respirator is properly fitted.

CONTAMINATED EQUIPMENT: Not available.

HYGIENE: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.

Section 9 - Physical and Chemical Properties

APPEARANCE: Colorless to clear yellow liquid. ODOR: Amine Odor ODOR THRESHOLD: Not available. PHYSICAL STATE: Liquid % Volume Volatile: Not available. Formula Lb/Gal: Not available. Boiling Range: Not available. Boiling Range: Not available. pH: Not available. MELTING POINT/FREEZING POINT: Not available. FLASH POINT: >184°C (364°F) FLAMMABILITY: Not available. UPPER/LOWER LIMITS FLAMMABITLITY: Not available. VAPOR PRESSURE: Not available.

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EVAPORATION RATE: 0.69 (butyl acetate = 1)
DENSITY: Not available.
RELATIVE DENSITY: 8.3-9.2 lbs/gal
SPECIFIC GRAVITY: 1.0-1.1 (Water=1)
SOLUBITLITY: Not available.
PARTITION COEFFICICIENT: Not available.
AUTO-IGNITION TEMPERATURE: 316°C (>600°F)
DECOMPOSITION TEMPERATURE: >300°C (>572°F)
VISCOSITY: 300-600cps @ 25°C
VAPOR DENSITTY: Not available.
Lbs VOC/Gallon Less Water: Not available.
Gms VOC/Liter Less Water: 0 grams/liter
%Solid. (w/w): Not available.

Section 10 - Stability and Reactivity

STABILITY: Stable when handled and stored at temperatures 15°C-32°C (60°C-90°F).

CONDITIONS TO AVOID: Avoid temperatures above 100°F and freezing temperatures. Avoid moisture contamination in containers.

INCOMPATIBLE MATERIALS: Will react with acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion of product will lead to toxic levels of ammonia. Oxides of nitrogen, carbon, aldehydes and ketones are produced.

POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with water (moisture) produces CO2 gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively higher in temperatures if the miscibility of the reactions partners is good or is supported by stirring or the presences of solvents.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

Section 11 - Toxicological Information

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

EYE: Causes eye irritation.
INHALATION: Harmful if inhaled.
SKIN: Causes skin irritation.
Ingestion: Harmful if swallowed.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Existing respiratory/pulmonary conditions may be aggravated by overexposure.

TARGET ORGANS: Pancreas, liver, thyroid, and eyes.

CANCER INFORMATION: No known significant effects or critical hazards.

Carcinogenicity: As of this publication, this material is not listed on the National Toxic Program (NTP) Report of Carcinogens. Please refer to the most recent information with NTP.

DEVELOPMENTAL INFORMATION: No known significant effects or critical hazards.

OTHER: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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MIXTURE TOXICITY: Not available.

ACUTE TOXICITY:

Component	LD50 Oral	LD50 Dermal
Polyoxypropylenediamine	480mg/kg (rat)	2,090mg/kg (rabbit)
Diethylmethylbenzenediamine	738mg/kg (rat)	2,090mg/kg (rabbit)
Polyetheramine	2,690 mg/kg (rat)	12,500 mg/kg (rabbit)

Section 12 - Ecological Information

ENVIRONMENTAL EFFECTS:

Toxicity:

Product Name	Result	Species	Exposure
Polyoxypropylenediamine	LC50 >100mg/L	Fish	96 hours
	LC50 >135mg/L	Algae	72 hours
	LC50 >15mg/L	Daphnia	48 hours
	Not readily biodegradable	-	unknown
Diethylmethylbenzenediamine	LC50 >200mg/L	Fish	48 hours
	LC50 >0.5mg/L	Daphnia	48 hours
	EC50 >104mg/L	Algae	72 hours
	EC50 >54mg/L	Algae	72 hours
	Not readily biodegradable	-	28 days
Polyetheramine	LC50 68mg/L	Fish	96 hours

Section 13 - Disposal Considerations

By-product wastes or process waste generation shall be eliminated and/or minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSTURE CONTROL/PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.

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Section 14 - Transport Informatio					lon
	DOT	IATA	IMDG	TDG	
UN Number	UN2735	UN3082	UN1263	UN2735	
UN proper shipping name	Corrosive, liquid	Corrosive, liquid	Corrosive, liquid	Corrosive, liquid	
Transport hazard class(es)	8	8	8	8	
Packing group	III	III	III		

SPECIAL PRECAUTIONS FOR USER: This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

Section 15 - Regulatory Information

U.S. Federal Regulations

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200)

HCS Classification: Toxic material, Irritant, Corrosive material

U.S. Federal regulations: United States Inventory (TSCA 8b): All components are listed or exempted. This product does not contain nor is it manufactured with ozone depleting substances.

TSCA 8(b)2 inventory: No ingredients listed.

TSCA 5(a) 2 final significant new use rule (SNUR): No ingredients listed.

TSCA 5(e) substance consent order: No ingredients listed.

TSCA 12(b) export notification: No ingredients listed.

SARA 313: Immediate (acute) health hazard Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): No ingredients listed.

Clean Air Act - Ozone Depleting Substances (ODS): This product does not contain nor is it manufactured with ozone depleting substances.

STATE REGULATIONS:

PENNSYLVANIA - RTK: No ingredients listed.

California Prop 65: This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.

Canada

WHMIS (Canada): WHMIS Class D-1A: Material causing immediate and serious toxic effects. WHMIS Class E: Corrosive

CEPA DSL: All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

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INTERNATIONAL LISTS:

Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted.

Section 16 - Other Information

HMIS: Health = 3 Flammability = 1 Physical Hazard = 0 Personal Protection = N/A
NFPA 704: Health = 3 Flammability = 1 Instability = 0

National Fire Protection Association (NFPA)



Hazardous Material Information System (HMIS)

Health	3
Flammability	1
Reactivity	0
PPE	

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 6/23/2015 - Original SDS version; approval JH