

Safety Data Sheet

MILSPRAY MIL-DTL-64159B Type II/III – 34088 Olive Drab - Component A
Revision Date: August 19, 2015

Contains Spectrum MIL-DTL-64159B T-II Water Dispersible CARC Urethane

Section 1 - Manufacturer Identification

Product Name: MIL-DTL-64159B Type II/III
34088 Olive Drab -
Component A

MILSPRAY

Military Technologies

Recommend Use: Touch-Up Military Paint

Not Recommended Use: Commodity General Public Use

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		NFPA	
Health	1	1	0
Flammability	1	1	0
Physical Hazard	0	1	0
Personal Protection			

Section 2 - Hazards Identification

GHS Ratings:

Skin Corrosion 2
Eye Corrosion 2A
Reproductive toxin 1B



GHS Signal Word: Danger

GHS Hazards:

Causes skin irritation
Causes serious eye irritation
May damage fertility or the unborn child

GHS Precautions

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash...thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Use personal protective equipment as required
Take off contaminated clothing and wash before reuse
IF ON SKIN: Wash with soap and 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/attention
If skin irritation occurs: Get medical advice/attention
Get medical advice/attention
Store locked up
Dispose of contents/ container in accordance with all applicable regulations.

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Section 3 - Composition/Information on Ingredients

Chemical	CAS No.	Weight Percent
Water	7732-18-15	40-50%
Trade Secret	N/A	10-20%
Polymeric condensate of urea & formaldehyde	9011-05-6	10-20%
Inorganic Metal Oxide	20344-49-4	5-10%
n-Methyl-2-Pyrrolidone	872-50-4	1-5%
Ethene, Homopolymer	68441-17-8	1-5%
Titanium Dioxide	13463-67-7	1-5%
Inorganic Metal Oxide	1317-61-9	1-5%

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 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: 95C (203F)

LEL: 1.00

UEL: 10.00

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

UNSUITABLE EXTINGUISHING MEDIA: Not available.

UNUSUAL FIRE & EXPLOSION HAZARDS: This water based solution is non-flammable however, in a fire situation vapors that 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.

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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.

NFPA 704: Health = 1 Flammability = 1 Instability = 0

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 absorbant material or chemical booms to limit spreading. If run-off occurs, notify authorities as required.

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 absorbant 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 absorbant 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.

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

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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

Chemical	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Water	OELs not established	OELs not established	
Trade Secret			
Polymeric condensate of urea & formaldehyde	OELs not established	OELs not established	PEL 15mg/m ³ - TWA (total dust) PEL 5mg/m ³ - TWA (respirable dust)
Inorganic Metal Oxide	OELs not established	OELs not established	
n-Methyl-2-Pyrrolidone	OELs not established	OELs not established	PEL 25 ppm-TLV
Ethene, Homopolymer	OELs not established	OELs not established	
Titanium Dioxide	PEL 15mg/m ³ - TWA (total dust)	TLV 10mg/m ³ - TWA (total dust)	
Inorganic Metal Oxide	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

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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 milky depending on product.

ODOR: Strong solvent/ammonia type odor.

ODOR THRESHOLD: Not available.

PHYSICAL STATE: Liquid

% Volume Volatile: 68.73

Formula Lb/Gal: 9.77

Boiling Range: 77 to 100°C

EVAPORATION RATE: Slower than ether.

pH: Not available.

MELTING POINT/FREEZING POINT: Not available.

FLASH POINT: 95°C (203°F)

FLAMMABILITY: Not available.

UPPER/LOWER LIMITS FLAMMABILITY: 10.00/1.00

VAPOR PRESSURE: Not available.

RELATIVE DENSITY: 1.170

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: 1.10

Grams VOC/Liter Less Water: 132

Section 10 – Stability and Reactivity

STABILITY: Stable.

CONDITIONS TO AVOID: Not available.

INCOMPATIBLE MATERIALS: The following incompatibilities may exist with components of this product. Strong oxidizing agents, acids, and alkali/base/caustic solutions, and heat. Strong oxidizing agents. Acids, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition in the presence of air may yield the following; Oxides of carbon, such as carbon dioxide & carbon monoxide. May form: aldehydes, carbon dioxide and carbon monoxide, ketones, organic acids.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

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Section 11 - Toxicological Information

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

TARGET ORGANS: Reproductive System, Skin

EFFECTS OF OVEREXPOSURE:

EYE: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

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.

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.

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.

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.

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.

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.

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-None; Description-N/A; % Weight-N/A; Carcinogen Rating-N/A

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: 5mg/L

COMPONENT TOXICITY:

n-Methyl-2-Pyrrolidone
Oral LD50: 3,598 mg/kg (Rat)
Dermal LD50: 8 g/kg (Rabbit)
Inhalation LC50: 3 mg/L (Rat)

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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: Non-Hazardous Water Base Paint

Hazard Class: Not applicable.

Packing Group: Not applicable.

Quantity: Not applicable.

Section 15 - Regulatory Information

Other regulatory information is listed where applicable.

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

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

872-50-4 n-Methyl-2-Pyrrolidone 1 to 5 %

13463-67-7 Titanium Dioxide 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:

n-Methyl-2-Pyrrolidone 1 to 5 %

Titanium Dioxide 5 to 10 %

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:

n-Methyl-2-Pyrrolidone 1 to 5 %

Titanium Dioxide 5 to 10 %

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

872-50-4

13463-67-7

EU Risk Phrases

R43: May cause sensitization by skin contact

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Safety Phrase:

S23: Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer)

S24: Avoid contact with skin

S37: Wear suitable gloves

S51: Use only in well-ventilated areas

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.

872-50-4 n-Methyl-2-Pyrrolidone 1.0 - 5%

Section 16 - Other Information

HMIS: Health = 1 Flammability = 1 Physical Hazard = 0 Personal Protection = N/A

NFPA 704: Health = 1 Flammability = 1 Instability = 0

Hazardous Material Information System (HMIS)

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	J

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

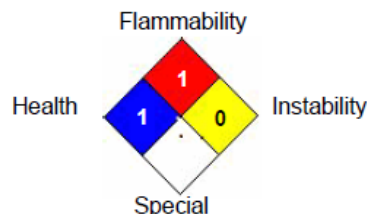
0 = INSIGNIFICANT

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

6/01/2015 - Original SDS version; approval JH

8/19/2015 - Sec 9: Flash Point correction JH