

Material Safety Data Sheet

for
Water Based Coating Materials

Produced for Distribution by **MILSPRAY**

Revision 1
Prepared 2005-08-11

Section 1 - Company & Product Identification

Product Name: MIL-DTL-64159 TY-II GREEN 383 CARC Product Code: WU2K-500
TradeName(s): Water Dispersible CARC Urethane

Manufactured by:

Spectrum Coatings Laboratories, Inc.
217 Chapman Street
Providence, RI 02905
ph:401-781-4847
fax:401-781-1075
web: spectrumcoatings.us
email: paintman97@aol.com

Emergency Contact Information:

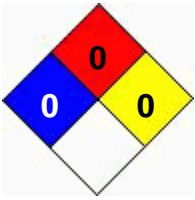
Daytime Information: 8:00am - 4:30pm EST
401-781-4847

24 Hour Emergency Contact:
Chemtrec - 800-424-9300
Emergency Information Only

Section 2 - Hazardous Ingredient Information

<u>Chemical Name / CAS No</u>	<u>OSHA Exposure Limits</u>	<u>ACGIH Exposure Limits</u>	<u>Other Exposure Limits</u>
Water 7732-18-5 43.57 to 48.15% Vapor Pressure:			
Green Chromium (III) Oxide 1308-38-9 8.90 to 9.84% Vapor Pressure:	PEL 0.5mg/m3 - TWA (as Chromium)	TLV 0.5mg/m3 - TWA (as Chromium)	
Inorganic Mixed Metal Oxide 68187-49-5 5.25 to 5.80% Vapor Pressure:	PEL 0.5mg/m3 - TWA (as Chromium)	TLV 0.5mg/m3 - TWA (as Chromium)	
Polyurethane Polymeric bead 9017-09-8 3.89 to 4.30% Vapor Pressure:	Not established	Not established	PEL 15mg/m3 - TWA (total dust) PEL 5mg/m3 - TWA (respirable dust)
n-Methyl-2-Pyrrolidone 872-50-4 3.70 to 4.08% Vapor Pressure: 0.29 mmHg@68 F	Not Established	Not Established	PEL 25ppm - TLV

Section 3 - Hazards Identification



HMIS Rating: 1 - 0 - 0

Primary Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Target Organs:

Reproductive System Skin

Effects of Overexposure, MIL-DTL-64159 TY-II GREEN 383 CARC:

Chronic Effects	Contains trivalent chromium compounds. As noted by the American Conference of Governmental Industrial Hygenists (ACGIH) in their publication, "Documentation of the Threshold Limit Values", repeated and prolonged exposures to trivalent chromium compounds may cause delayed effects involving the respiratory system.
Eye Contact	Causes eye burns. May cause 'blue haze' or 'halo vision'. May cause chemical conjunctivitis and corneal damage.Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.
Skin Contact	Harmful if absorbed through the skin. Causes skin burns. May cause skin rash, and cold and clammy skin with cyanosis or pale color.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	Harmful if swallowed. May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. May cause systemic effects.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.
Inhalation	Irritation may lead to chemical pneumonitis and pulmonary edema. Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects.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. Syntoms 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 Organs	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.
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.

Effects of Overexposure, MIL-DTL-64159 TY-II GREEN 383 CARC:

Developmental Info. 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.

Developmental 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.

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 4 - 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)

Section 5 - Fire Fighting Measures

Flash Point: None

Autoignition: Will not occur.

LEL: 1.3 %

UEL: 9.5 %

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

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.

Hazardous Products of Combustion: May form oxides of carbon, and nitrogen.

Special Fire Fighting Procedures: 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 MSDS.

Section 6 - Accidental Release Measures

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.

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 wequipment 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.

Section 7 - Handling and Storage Conditions

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. Sufficeintly 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 Requirements: 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

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.

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.

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.

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 sufficeint. 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.

Section 9 - Physical & Chemical Properties

This mixture typically exhibits the following properties under normal circumstances.

Appearance	Viscous liquid either colored or milky depending on product.
Odor	Strong solvent/ammonia type odor.
Physical State	Liquid

Vapor Density	Heavier than air.
Evaporation Rate	Slower than ether.
Boiling Range	77 to 100 C
% Volume Volatile	64.05
Specific Gravity (SG)	1.241
Formula Lb / Gal	10.35
% Volume Volatile	64.05
Lbs VOC/Gallon Less Water	1.14

Section 10 - Reactivity Data

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.

The following incompatibilities may exist with components of this product.

- Non-reactive material.
- Strong oxidizing agents, acids, and alkali/base/caustic solutions, and heat.
- Acids, strong oxidizing agents.

Thermal decomposition in the presence of air may yield the following:

- May form: aldehydes, carbon dioxide and carbon monoxide, ketones, organic acids.
- Oxides of carbon, such as carbon dioxide & carbon monoxide.

Section 11 - Toxicological Information

Water

LC 50: No data found

LD 50: No data found

Green Chromium (III) Oxide

LC 50: No data found

LD 50: No data found

Inorganic Mixed Metal Oxide

LC 50: No data found

LD 50: No data found

Polyurethane Polymeric bead

LC 50: No data found

LD 50: No data found

n-Methyl-2-Pyrrolidone

LC 50: No data found

LD 50: No data found

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Section 12 - Ecological Information

Section 13 - 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

Section 14 - Transportation Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>HazardClass</u>
DOT	Non Hazardous Water Base Paint	Not Reg.	N/A	N/A

Section 15 - 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.

4420-74-0 Gamma-Mercaptopropyltrimethoxysilane

68187-49-5 Cobalt Chromite Green Spinel

1308-38-9 Chrome Oxide Green

121-44-8 Triethylamine

872-50-4 NMP

Section 16 - Other Information

NON-WARRANTY. The information presented in this publication is based upon the research and experience Spectrum Coatings and its suppliers. No representation or warranty is made concerning the accuracy or completeness of the information presented in this publication. Spectrum Coatings makes no warranty or representation of any kind, express or implied, including without limitation any warranty of merchantability or fitness for any particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by Spectrum Coatings are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. Spectrum Coatings shall in no event be liable for any special, incidental, or consequential damages.