

# SAFETY DATA SHEET

May 01, 2015

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## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

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**Product ID :** 518-1014FF00115

**Product Name :**

**Revision Date :** May 01, 2015

**Date Printed :** Jun 10, 2015

**Version:** 1.0

**Supersedes Date :** N.A.

**Manufacturer's Name :**

**Address :**

**Emergency Phone :**

**Information Phone :**

**Fax :**

**Product/Recommended Uses:** For Further Information, Refer to the Product Technical Data Sheet.

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## SECTION 2) HAZARDS IDENTIFICATION

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### Classification:

Aspiration Hazard - Category 1

Eye Irritation - Category 2A

Respiratory Sensitizer (Solid/Liquid) - Category 1

Skin Sensitizer - Category 1

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Flammable Liquids Category 3

Acute toxicity, Inhalation - Category 4

### Pictograms:



### Signal Word:

Danger

### Hazardous Statements - Physical:

H226 - Flammable liquid and vapor

### Hazardous Statements - Health:

H332 - Harmful if inhaled

H304 - May be fatal if swallowed and enters airways

H350 - May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H319 - Causes serious eye irritation

H340 - May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 - May cause an allergic skin reaction

### Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

**Precautionary Statements - Prevention:**

- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271 - Use only outdoors or in a well-ventilated area.
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P264 - Wash thoroughly after handling.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 - Keep container tightly closed.
- P240 - Ground/bond container and receiving equipment.
- P241 - Use explosion-proof [electrical/ventilating/lighting/...] equipment.
- P242 - Use only non-sparking tools.
- P243 - Take action to prevent static discharges.
- P284 - [In case of inadequate ventilation] wear respiratory protection.
- P272 - Contaminated work clothing should not be allowed out of the workplace.

**Precautionary Statements - Response:**

- P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P312 - Call a POISON CENTER/doctor if you feel unwell.
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
- P331 - Do NOT induce vomiting.
- P308 + P313 - IF exposed or concerned: Get medical advice/attention.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P370 + P378 - In case of fire: Check Section-5 (Fire Fighting Measures)
- P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P302 + P352 - IF ON SKIN: Wash with plenty of water.
- P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.
- P321 - Specific treatment (see section 4 on this SDS).
- P362 + P364 - Take off contaminated clothing. And wash it before reuse.

**Precautionary Statements - Storage:**

- P405 - Store locked up.
- P403 + P235 - Store in a well-ventilated place. Keep cool.

**Precautionary Statements - Disposal:**

- P501 - Dispose of contents/ container to an approved waste disposal plant.

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**SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS**

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CAS	Chemical Name	% by Weight
0028182-81-2	HEXAMETHYLENE DIISOCYANATE POLYMER	59% - 100%
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	8% - 14%
0000822-06-0	HEXAMETHYLENE DIISOCYANATE	0.1% - 0.2%

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**SECTION 4) FIRST-AID MEASURES**

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**Inhalation:**

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

**Skin Contact:**

Rinse/wash with lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

**Eye Contact:**

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

**Ingestion:**

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give 1 or 2 glasses of milk or water to drink and refer person to medical personnel. Do not give anything by mouth to an unconscious person.

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**SECTION 5) FIRE-FIGHTING MEASURES**

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**Suitable Extinguishing Media:**

Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

**Specific Hazards in Case of Fire:**

Excessive pressure or temperature may cause explosive rupture of containers.

**Fire-fighting Procedures:**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

**Special Protective Actions:**

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

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**SECTION 6) ACCIDENTAL RELEASE MEASURES**

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**Emergency Procedure:**

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

**Recommended Equipment:**

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

**Personal Precautions:**

Avoid breathing vapors. Avoid contact with skin, eyes or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

**Environmental Precautions:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

**Methods and Materials for Containment and Cleaning up:**

Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

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**SECTION 7) HANDLING AND STORAGE**

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**General:**

Wash hands after use.  
Do not get in eyes, on skin or on clothing.  
Do not breathe vapors or mists.  
Use good personal hygiene practices.  
Eating, drinking and smoking in work areas is prohibited.  
Remove contaminated clothing and protective equipment before entering eating areas.  
Eyewash stations and showers should be available in areas where this material is used and stored.  
Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

**Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

**Storage Room Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.  
Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks.  
Do not cut, drill, grind, weld, or perform similar operations on or near containers.

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**SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**Eye Protection:**

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

**Skin Protection:**

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

**Respiratory Protection:**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Use either an atmosphere supplying respirator or an air-purifying respirator for organic vapors.

**Appropriate Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA-Tables-Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
AROMATIC HYDROCARBON MIXTURE >C9	500	2000			1							
HEXAMETHYLENE DIISOCYANATE								0.005	0.035			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
AROMATIC HYDROCARBON MIXTURE >C9							
HEXAMETHYLENE DIISOCYANATE	0.005	0.034				URT irr; resp sens	

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**SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES**

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## Physical and Chemical Properties

Density	9.22 lb/gal
Specific Gravity	1.10
VOC Regulatory	0.00 lb/gal

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VOC Part A & B Combined	2.8 lb/gal
Appearance	Thin Clear Liquid
Odor Threshold	N.A.
Odor Description	Mild Aromatic
pH	N.A.
Water Solubility	Reacts with Water
Flammability	N/A
Flash Point Symbol	N.A.
Flash Point	42 °C
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Freezing Point	N.A.
Melting Point	N.A.
Low Boiling Point	138 °C
High Boiling Point	N.A.
Auto Ignition Temp	N.A.
Decomposition Pt	N.A.
Evaporation Rate	N.A.
Coefficient Water/Oil	N.A.

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## SECTION 10) STABILITY AND REACTIVITY

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### Stability:

Material is stable at standard temperature and pressure.

### Conditions to Avoid:

Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.

### Hazardous Reactions/Polymerization:

Will not occur but aliphatic amine will cause irreversible polymerization with considerable heat build up.

### Incompatible Materials:

This product will react with materials such as amines, alkalis and acids. Avoid strong oxidizing agents. Some reactions can be violent.

### Hazardous Decomposition Products:

Combustion products: organic vapors and thermal decomposition fragments.

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## SECTION 11) TOXICOLOGICAL INFORMATION

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### Skin Corrosion/Irritation:

Repeated skin contact may cause a persistent irritation or dermatitis. May also aggravate an existing skin condition.

### Serious Eye Damage/Irritation:

Causes serious eye irritation

### Respiratory/Skin Sensitization:

Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness.

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May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

**Carcinogenicity:**

May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

**Germ Cell Mutagenicity:**

May cause genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

**Reproductive Toxicity:**

No data available

**Specific Target Organ Toxicity - Single Exposure:**

No data available

**Specific Target Organ Toxicity - Repeated Exposure:**

Repeated exposure generally aggravates the following medical conditions : Cardiovascular disease and Chronic respiratory disease.

**Aspiration Hazard:**

May be fatal if swallowed and enters airways

**Acute Toxicity:**

Ingestion : Irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion.

0000822-06-0            HEXAMETHYLENE DIISOCYANATE

LC50 (rat): 310-350 mg/m3 (45-51 ppm) (4-hour exposure) (1,2)

LC50 (rat): 274 mg/m3 (40 ppm) (1-hour exposure); 137 mg/m3 (20 ppm) (equivalent 4-hour exposure) (2)

LC50 (mouse): 30 mg/m3 (4.4 ppm) (2-hour exposure); 21.2 mg/m3 (3.1 ppm) (equivalent 4-

LD50 (oral, rat): 710 mg/kg (1); 738 mg/kg (2); 960 mg/kg (2)

LD50 (oral, mouse): 350 mg/kg; 1980 mg/kg (2)

LD50 (dermal, rabbit): 570 mg/kg (1); 593 mg/kg (2)

**Potential Health Effects - Miscellaneous**

0028182-81-2    HEXAMETHYLENE DIISOCYANATE POLYMER

Overexposure may cause asthma-like reactions with shortness of breath, wheezing, cough, which may be permanent; or permanent lung sensitization. This effect may be delayed for several hours after exposure. The following medical conditions may be aggravated by exposure: asthma, skin disorders, respiratory disorders. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin. Skin or eye contact may cause any of the following: irritation.

0064742-95-6    AROMATIC HYDROCARBON MIXTURE >C9

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors.

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**SECTION 12) ECOLOGICAL INFORMATION**

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**Toxicity:**

No data available.

**Persistence and Degradability:**

No data available.

**Bioaccumulative Potential:**

No data available.

**Mobility in Soil:**

No data available.

**Other Adverse Effects:**

No data available.

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**SECTION 13) DISPOSAL CONSIDERATIONS**

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**Waste Disposal:**

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

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## SECTION 14) TRANSPORT INFORMATION

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### U.S. DOT Information:

Not Regulated

### IMDG Information:

Shipping Name: PAINT  
UN/NA #: 1263  
Hazard Class: 3 Packing Group: III  
Placard: Flammable  
Marine Pollutant: No data available

### IATA Information:

Shipping Name: PAINT  
UN/NA #: 1263  
Hazard Class: 3 Packing Group: III  
Placard: Flammable

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## SECTION 15) REGULATORY INFORMATION

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CAS	Chemical Name	% By Weight	Regulation List
0000822-06-0	HEXAMETHYLENE DIISOCYANATE	0.1% - 0.2%	CERCLA,HAPS,SARA312,SARA313,VHAPS,VOC,TSCA
0028182-81-2	HEXAMETHYLENE DIISOCYANATE POLYMER	59% - 100%	SARA312,TSCA
0064742-95-6	AROMATIC HYDROCARBON MIXTURE >C9	8% - 14%	SARA312,VOC,TSCA

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## SECTION 16) OTHER INFORMATION

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### OTHER INFORMATION:

Note: As per GHS, category 1 is the greatest level of hazard within each class.

### GLOSSARY:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

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