

## Material Safety Data Sheet

Revision Date: 08/12      Print Date: 08/27/12  
Version 2.0      MSDS Identification: 1410 CS - Part B      Top Coat / Sealer

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : 1410 CS - Part B

Product Use Description : Top Coat / Sealer

Company : Protective Floorings and Linings  
A Division of Milamar Coatings, LLC  
311 N.W. 122nd St, Suite 100  
Oklahoma City, OK 73114

Telephone : 405-755-8448

Emergency Telephone Number: ChemTel 800-255-3924 or 813-248-0585 (International)

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS NUMBER	Weight %
Homopolymer of hexamethylene diisocyanate (*) OSHA PEL - MG/M3 0.5 TWA ACGIH TWA - MG/M3 0.5 STEL	28182-81-2	99-100%
Hexamethylene diisocyanate (monomer) (a,b,c) OSHA PEL - PPM 0.005 ACGIH TWA - PPM 0.005	822-06-0	<0.2%

### 3. HAZARDS INFORMATION

#### Emergency Overview

Yellow Liquid, nearly odorless.  
May cause eye, skin and respiratory tract irritation.  
May cause allergic respiratory reaction.  
Harmful if inhaled or swallowed.  
May cause lung damage.  
As a result of previous overexposure by inhalation, or a single large dose, certain individuals may develop isocyanate sensitization which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Prolonged skin contact can cause skin sensitization. Individuals who have developed skin sensitization can develop symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Toxic gases are emitted during burning or thermal decomposition.  
Hazard symbol for this product - Xi. Risk phrases - R 36/37/38, 42/43.

#### Potential Health Effects (See Section 11 for toxicological data.)

Inhalation : High concentrations are irritating to the respiratory tract: may cause headache, dizziness, nausea, vomiting and malaise. Chronic overexposures, or a single large dose, may cause isocyanate

# Material Safety Data Sheet

Revision Date: 08/12  
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MSDS Identification: 1410 CS - Part B

Top Coat / Sealer

		sensitization and subsequent reaction to a later exposure to isocyanate at levels well below the TLV.
Skin	:	Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis. Chronic exposure may result in skin sensitization, which can cause symptoms as a result of contact with very small amounts of liquid material or as a result of exposure to vapor. Cured material is hard to remove.
Eyes	:	Contact causes severe irritation and pain associated with redness and swelling on the conjunctiva.
Ingestion	:	Moderately toxic; may cause headache, dizziness, diarrhea and general weakness; large doses may result in red blood cell hemolysis.
Carcinogenicity	:	NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

## 4. FIRST AID MEASURES

Inhalation	:	Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.
Skin Contact	:	Remove contaminated clothing. Wash affected skin thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse; if irritation persists, seek medical attention.
Eyes	:	Remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.
Ingestion	:	DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

## 5. FIRE-FIGHTING MEASURES

Flash Point	:	> 450°F
Flammable Limits	:	LEL: not applicable UEL: Not applicable Auto ignition Temperature: Not determined NFPA Class: IIIB
General Hazards	:	Product will support combustion. Products of combustion include compounds of carbon, hydrogen, and oxygen, including carbon monoxide.
Extinguishing Media	:	Carbon dioxide, water, water fog, dry chemical, chemical foam.
Fire Fighting Procedures	:	Firefighters must wear full face piece and self-contained breathing apparatus in positive pressure mode. Do not use solid stream of water since stream will scatter and spread fire. Fine water spray can be used to keep fire-exposed containers cool.
Unusual Fire and Explosion Hazards	:	Closed containers can explode due to buildup of pressure when exposed to extreme heat. Do not use direct stream of water on pool fires as product may reignite on water surface. Caution - material may support combustion!
Hazardous Combustion Products	:	Smoke, fumes, oxides of carbon.

# Material Safety Data Sheet

Revision Date: 08/12  
Version 2.0

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Top Coat / Sealer

## 6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

Spill Or Leak Procedures : CAUTION - WILL SUPPORT COMBUSTION. Do not wash to sanitary sewer. All spills - confine spill, soak up with approved absorbent, shovel product to approved container for disposal. Flush area with water, recover flush for proper disposal.

## 7. HANDLING AND STORAGE

Handling and Storage Precautions : Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures, open flames. CAUTION - This material will support combustion. Keep this and other chemicals out of reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls : The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment. See Section 2 for Component Exposure Guidelines.

Personal Protective Equipment

Respiratory Protection : None required while threshold limits (Section 2) are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator for use with isocyanate-containing environments.

Protective Gloves : Neoprene or rubber gloves with cuffs.

Eye Protection : Goggles with side shields; safety eye bath nearby.

Other Protective Clothing Or Equipment : Coveralls, apron, or other equipment should be worn to minimize skin contact.

Work / Hygienic Practices : Practice safe workplace habits. Minimize contact, as well as chemicals in general.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure (mm Hg) : < 0.01 mm Hg @ 20 ° C.

Vapor Density (Air = 1) : Not determined

Specific Gravity (Water=1) : 1.16

Evaporation Rate (Water=1) : Not Volatile

Solubility In Water : Insoluble.

Freezing Point : Not Determined

pH : Not Determined

# Material Safety Data Sheet

Revision Date: 08/12  
Version 2.0

Print Date: 08/27/12  
MSDS Identification: 1410 CS - Part B

Top Coat / Sealer

Appearance and Odor	:	Yellow liquid, practically odorless
Boiling Point	:	Not Measured
Physical State	:	Liquid
Viscosity	:	Approximately 2500 mPa's @ 74 ° F
Volatile Organic Compounds (Total VOC's)	:	None

## 10. STABILITY AND REACTIVITY

Stability	:	Stable under recommended storage conditions.
Conditions To Avoid	:	Extreme Temperatures, open flames. Contact with moisture may cause polymerization.
Incompatibilities	:	Strong oxidizers, water, amines
Hazardous Decomposition or Byproducts	:	Decomposition will no occur if handled and stored properly. In case of fire, oxides of carbon and nitrogen, HCN, HDI, hydrocarbons, fumes, and smoke may be produced.
Hazardous Polymerization	:	May occur.

## 11. TOXICOLOGICAL INFORMATION

Hazardous Ingredients	CAS #	EINECS #
Homopolymer of hexamethylene diisocyanate (*)	28182-81-2	Not found
LD50 of Ingredient >10,000mg / kg Oral - rat		
LC50 of Ingredient 137-1153 mg / m3 / 4H Inhalation - rat		
Hexamethylene diisocyanate (monomer) (a,b,c)	822-06-0	212-485-8
LD50 of Ingredient 710mg / kg Oral - rat		
LC50 of Ingredient 275 mg / m3 Inhalation - rat		

## 12. ECOLOGICAL INFORMATION (for detailed Ecological data, write or call the address or non-emergency number shown on Section 1).

No data is available on the adverse effects of this material on the environment. Neither COD or BOD data is available. Based on the chemical composition of this product, it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

## 13. DISPOSAL CONSIDERATIONS

# Material Safety Data Sheet

Revision Date: 08/12  
Version 2.0

Print Date: 08/27/12  
MSDS Identification: 1410 CS - Part B

Top Coat / Sealer

Waste Disposal Method: Dispose of in accordance with Local, State, and Federal Regulations: this product is toxic to fish, do not discharge into lakes, ponds, streams or public waters. Product is classified as non-hazardous, however, non-hazardous materials may become hazardous waste upon contact with other products. Refer to "40 CFR Protection of Environment Parts 260-299" for complete waste disposal regulations. Consult your local, state, or Federal Environmental Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

## 14. TRANSPORT INFORMATION

CFR (DOT.)

Proper Shipping Name	:	Non-Hazardous for transport
Class	:	Not Regulated
Reference	:	Not Applicable
UN / ID No.	:	None
Label	:	None Required
Hazard Symbols:	:	None

IATA Hazard Class / Pack Group	:	Not Regulated
IMDG Hazard Class	:	Not Regulated
RID/ADR Dangerous Goods Code	:	Not Regulated
UN TDG Class / Pack Group	:	Not Regulated
Hazard Identification Number (HIN)	:	None

## 15. REGULATORY INFORMATION (not meant to be all-inclusive -- selected regulations represented)

TSCA Status : All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because the low Volume exemption has been granted in accordance with 40 CFR 723.50.

Sara Title III : Section 311/312 Hazard Categories : Acute health, eye and skin irritant.  
Section 313 Reportable Ingredients: None

CERCLA : None

CPR (Canadian Controlled Products Regulations) : WHMIS Classification: D2B. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List) : Components of the product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL/NDL (Canadian Domestic Substances List / Non-Domestic Substances List):  
Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise noted.

EINECS (European Inventory of Existing Commercial Chemical Substances):  
Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases R36/37/38 Irritating to eyes, respiratory system and skin. R42/43 May cause sensitization by inhalation and skin contact.

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Revision Date: 08/12  
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SYMBOL REQUIRED FOR LABEL - Irritant.

EC Safety Phrases -

S23 Do Not Breathe Vapor

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

S45 In case of accident or if you feel sick, seek medical advice immediately (show the label whenever possible)

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## 16. OTHER INFORMATION

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS Ratings: Health - 2\* Flammability - 0 Reactivity - 0 Personal Protective Equipment - B (Safety Glasses, Gloves)

Prepared By : Protective Floorings and Linings. EH&S Product Safety Department

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