

Safety Data Sheet

Revision Date: 11-23-2015
Product Code: FC7961

1. IDENTIFICATION

Product Name	FC TOPCOAT HARDENER
Product Code	FC7961
Document ID	GFC7961
Revision Number	2
Prior Version Date	06-19-2015
Intended Use	Urethane Paint Hardener/Catalyst
Restrictions On Use	For Industrial Use Only
Chemical Family	Urethane Co-Reactant
Chemical Manufacturer / Importer	NEOGARD® - a Division of JONES-BLAIR® Company, LLC 2728 Empire Central Dallas, TX 75235 1-214-353-1600
Emergency Telephone Number:	ChemTrec Center 1-800-424-9300 International: 703-527-3887

2. HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Hazard Pictograms



GHS Classification

Respiratory Sensitisation Category 1A
Skin Sensitisation Category 1
Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2
Carcinogenicity Category 2
Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3
Acute Toxicity - Inhalation Dust / Mist Category 4
Acute Toxicity - Inhalation Vapour Category 4

Signal Word

Danger

Hazard Statements

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapours or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace.

Safety Data Sheet

Revision Date: 11-23-2015

Product Code: FC7961

Response	Wear protective gloves, protective clothing, eye protection and face protection. Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Call a POISON CENTER or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Take off contaminated clothing and wash before reuse.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards Not Otherwise Classified (HNOC)	Not applicable

Additional Information

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Component</u>	<u>CAS #</u>	<u>%</u>
Polymeric Diphenylmethane Diisocyanate	9016-87-9	40 - 60
4,4'-DIPHENYLMETHANE DIISOCYANATE	101-68-8	15 - 40
Diphenylmethane Diisocyanate Mixed isomers	26447-40-5	5 - 10
Diphenylmethane-2,4'-diisocyanate	5873-54-1	1 - 5

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Inhalation	Remove individual to fresh air after an airborne exposure if any symptoms develop as a precautionary measure. If breathing difficulty persists or occurs later, consult a physician and have MSDS available.
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops or persists.
Ingestion	If swallowed, do not induce vomiting. Get medical attention immediately.
Most Important Acute Symptoms and Effects	Not Available
Most Important Delayed Symptoms and Effects	Not Available
Special treatment needed:	No additional first aid information available

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Unsuitable Extinguishing Media	No data available
Fire and/or Explosion Hazards	Not applicable

Safety Data Sheet

Revision Date: 11-23-2015

Product Code: FC7961

Hazardous Combustion Products

Carbon dioxide, Carbon monoxide, Isocyanates, Isocyanic Acid, Nitrogen containing gases, Hydrogen cyanide

Special Protective Equipment and Precautions for Fire-Fighters

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Follow personal protective equipment recommendations found in Section VIII of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including the material spilled, the quantity of the spill, the area in which the spill occurred. See MSDS sections III, XIII and XV for disposal considerations.

Methods and Material for Containment and Cleaning Up

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Dike with suitable absorbent material. Gather and store in a sealed container pending disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Overexposure may be harmful. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Conditions for Safe Storage

Store in a cool dry place. Keep container(s) closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

<u>Chemical Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH STEL</u>
Polymeric Diphenylmethane Diisocyanate		0.01 ppm; 0.05mg/m ³ TWA	
4,4'-Diphenylmethane diisocyanate		0.005 ppm TWA	

**Appropriate Engineering Controls
Respiratory Protection**

Local exhaust ventilation or other engineering controls may be required when handling or using this product to avoid overexposure. General or local exhaust ventilation is the preferred means of protection. In cases where ventilation is inadequate, respiratory protection may be required to avoid overexposure. Follow respirator manufacturer's directions for respirator use. For poorly ventilated areas or during spray application use NIOSH approved supplied air respirator unless air monitoring demonstrates vapor/mist levels below applicable limits. When monomeric isocyanate concentrations are below 0.05 ppm (10 times the 8 hour TWA exposure limit), an appropriate combination organic vapor and particulate respirator (NIOSH approved) may be appropriate. An end-of-service-life Indicator (ESLI) or a change schedule is mandatory.

**Eye Protection
Skin Protection**

Wear safety glasses with side shields when handling this product. Avoid all skin contact by covering as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Clothing suitable to prevent skin contact.

General Hygiene Conditions

As with all chemicals, good industrial hygiene practices should be followed when handling this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid
Color	Brown
Odor	Musty

Safety Data Sheet

Revision Date: 11-23-2015
Product Code: FC7961

Odor Threshold	No data available
pH	No data available
Melting Point/Freezing Point (°F/°C)	No data available / No data available
Initial Boiling Point and Boiling Range Low (°F)	No data available
Flash Point (°F/°C)	350 / 177
Flammability (solid, gas)	No data available
Upper Flammable/Explosive Limit	No data available
Lower Flammable/Explosive Limit	No data available
Vapor Density	No data available
Relative Density	1.234
Solubility in Water	Reacts slowly with water.
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature:	No data available
Volatiles, % by volume	0.00
Volatiles, % by weight	0.00
Volatile Organic Chemicals (g/L) (Regulatory, Calculated)	0.00
(Actual, Calculated)	0.00
Density	10.20 - 10.40 lbs./Gal

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition.
Hazardous Decomposition Products	Carbon dioxide, Carbon monoxide, Isocyanates, Isocyanic Acid, Nitrogen containing gases, Hydrogen cyanide

11. TOXICOLOGICAL INFORMATION

Immediate (Acute) Health Effects by Route of Exposure

Skin Contact Sensitizer. Avoid exposure. If sensitized, repeated exposures will result in irritation, reddening, and rashes even for very low exposures.

Long-Term (Chronic) Health Effects

Inhalation Isocyanate vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. Exposure well above the TLV may lead to generally reversible bronchitis, bronchial spasm and pulmonary edema. Repeated overexposure causes sensitization in some individuals resulting in asthma-like symptoms on subsequent exposures below the TLV.

Persons with preexisting bronchial hyperactivity can respond to concentrations below the TLV with similar symptoms as well as an asthma attack.

Skin Contact Prolonged contact may cause an allergic skin reaction.

Product Toxicology Data

Component Toxicology Data

Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
Polymeric Diphenylmethane Diisocyanate	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	Inhalation LC50 (4h) Rat 0.49 mg/L
4,4'-Diphenylmethane	Oral LD50 Rat > 10,000	Dermal LD50 Rabbit >	Inhalation LC50 (4h) Rat

Safety Data Sheet

Revision Date: 11-23-2015
Product Code: FC7961

diisocyanate	mg/kg	9400 mg/kg	0.49 mg/L
Diphenylmethane-2,4'-diisocyanate		Dermal LD50 Rabbit > 9400 mg/kg	Inhalation LC50 (4h) Rat 0.49 mg/L

Carcinogen Information

Chemical Name 4,4'-Diphenylmethane diisocyanate	IARC Carcinogen 3	OSHA Carcinogen	NTP Carcinogen
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12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available)	No data available
Mobility in soil	No data available

13. DISPOSAL CONSIDERATIONS

Safe Handling of Waste Refer to other sections of this SDS to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information and does not contain all regulatory transportation details. Refer to all applicable regulations for domestic, international, air, vessel and ground transportation requirements and restrictions.

DOT Basic Description:	Environmentally Hazardous Substance, liquid, n.o.s. (contains 4,4'-Diphenylmethane Diisocyanate (MDI))
	When in individual containers of less than the Product RQ, this material ships as non-regulated.
Hazard Class:	9
UN Number:	UN3082
Packing Group:	III
Other:	Single containers less than 5,000 lbs are not regulated.
IATA Air Shipping Name:	Not Regulated
IMO Shipping Name:	Not Regulated
Marine Pollutant:	N

15. REGULATORY INFORMATION

TSCA Status All components of this product are either listed on the TSCA Inventory; or, are not subject to the inventory notification requirements.

Regulated Components

<u>SARA EHS Chemicals</u>	<u>CAS #</u>	<u>%</u>
Not applicable		
<u>CERCLA</u>		
Methylene diisocyanate	101-68-8	15 - 40
<u>SARA 313</u>		
Polymeric diphenylmethane diisocyanate	9016-87-9	40 - 60
Methylenebis(phenylisocyanate) (MDI)	101-68-8	15 - 40

Safety Data Sheet

Revision Date: 11-23-2015
Product Code: FC7961

SARA 311/312

Health (Acute): Y
Health (chronic): Y
Fire (Flammable): N
Pressure: N
Reactivity: Y

U. S. State Regulations:

California Prop 65 Chemicals

Cancer	CAS #	%
Not applicable		
Reproductive		
Not applicable		

Canadian Regulations:

CEPA DSL: The components of this product ARE listed on the Canadian Domestic Substances List.
WHMIS Hazard Class: D2A

16. OTHER INFORMATION

Revision Date	11-23-2015
Disclaimer	This SDS has been prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada's Controlled Product Regulations (CPR). To the best of our knowledge the information contained herein is accurate. Determination of safe handling, application and use of this material is the responsibility of the end user. This information is furnished without warranty, expressed or implied.