1. IDENTIFICATION

Product Name

NEOCRETE WATER BORNE POLYURETHANE RESIN HARDENER

Product Code	70801
Document ID	G70801
Revision Number	1
Prior Version Date	None
Intended Use	Urethane Paint Hardener/Catalyst
Restrictions On Use	For Industrial Use Only
Chemical Family	Urethane Hardener
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 Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3 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.
Precautionary Statements	
Prevention Response	Avoid breathing 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. Wear protective gloves, protective clothing, eye protection and face protection. 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. Call a POISON CENTER or physician

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	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

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

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

4. FIRST-AID MEASURES

Inhalation Eye Contact Skin Contact Ingestion	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. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately. Wash with soap and water. Get medical attention if irritation develops or persists. If swallowed, do not induce vomiting. Get medical attention immediately.		
Most Important Acute Sympt and Effects Most Important Delayed Syn and Effects Special treatment needed: 5. FIRE-FIGHTING MEASURE	toms Not Available Not Available No additional first aid information available		
Suitable Extinguishing Media Unsuitable Extinguishing Media Fire and/or Explosion Hazards Hazardous Combustion Products Special Protective Equipment and Precautions for Fire-Fighters 6. ACCIDENTAL RELEASE MEASURES		Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. No data available Not applicable Hydrogen cyanide, Carbon dioxide, Carbon monoxide, Nitrogen containing gases, Isocyanates, Isocyanic Acid Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment.	
BACCIDENTAL RELEASE N Personal Precautions, Prote Equipment and Emergency I	ctive	Follow personal protective equipment recommendations found in Section VIII of this SDS. Additional precautions may be necessary	

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Methods and Material for Containment and Cleaning Up	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. 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

Precautions for Safe Handling

Conditions for Safe Storage

Overexposure may be harmful. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Store in a cool dry place. Keep container(s) closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical Compo	onent	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL
Polymeric Diphenylm	nethane		0.01ppm;	
Diisocyanate			0.05mg/m ³ TWA	
4,4'-Diphenylmethane di	iisocyanate		0.005 ppm TWA	
Appropriate Engineering Controls Respiratory Protection	using this pr General or le ventilation is Follow respi or during sp monitoring c isocyanate of an appropria	st ventilation or other engir roduct to avoid overexposu ocal exhaust ventilation is t inadequate, respiratory pr rator manufacturer's directi ray application use NIOSH demonstrates vapor/mist lev concentrations are below 0 ate combination organic va ropriate. An end-of-service	re. he preferred means of pro otection may be required ons for respirator use. Fo approved supplied air res vels below applicable limit .05 ppm (10 times the 8 ho por and particulate respira	otection. In cases where to avoid overexposure. or poorly ventilated areas pirator unless air s. When monomeric our TWA exposure limit), ttor (NIOSH approved)
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	Colorless
Odor	Musty
Odor Threshold	No data available
рН	No data available
Melting Point/Freezing Point (年/℃)	No data available / No data available
Initial Boiling Point and Boiling Range	
Low (Ŧ)	No data available
Flash Point (年/℃)	350 / 177
Flammability (solid, gas)	No data available
Upper Flammable/Explosive Limit	No data available

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Lower Flammable/Explosive Limit	No data available				
Vapor Density	No data available				
Relative Density	1.217				
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				
Viscosity	60 - 80 CPS				
Volatiles, % by volume	0.00				
Volatiles, % by weight	0.00				
Volatile Organic Chemicals (g/L)					
(Regulatory, Calculated)	0.00				
(Actual, Calculated)	0.00				
Density	10.06 - 10.26 lbs./Ga	l			
10. STABILITY AND REACTIVITY					
Chemical stability		r normal conditions.			
Possibility of Hazardous Reactions	No data ava				
Conditions to Avoid		es above the high flash point o			
		combination with sparks, open	flames, or other		
	sources of i				
Hazardous Decomposition Products		yanide, Carbon dioxide, Carbo			
	containing g	jases, Isocyanates, Isocyanic A	Acid		
1. TOXICOLOGICAL INFORMATION					
Immediate (Acute) Health Effects by	Route of Exposure				
Skin Contact		ure. If sensitized, repeated exp	osures will result in		
		rashes even for very low expo			
Long-Term (Chronic) Health Effects					
Inhalation	Isocyanate vapors or m	ist at concentrations above the	TLV can irritate the		
		he respiratory tract causing rur			
		ort, shortness of breath and re-			
	Exposure well above the	TLV may lead to generally rev	versible bronchitis,		
		monary edema. Repeated ove			
	sensitization in some inc	lividuals resulting in asthma-lik	e symptoms on		
	subsequent exposures b				
		bronchial hyperactivity can rea	spond to		
	concentrations below the	e TLV with similar symptoms as	s 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		

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

Carcinogen Information			
Chemical Name	IARC Carcinogen	OSHA Carcinogen	NTP Carcinogen

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4,4'-Diphenylmethane diisocyanate	3			
12. ECOLOGICAL INFORMA	ΓΙΟΝ			
Ecotoxicity (aquatic and terrestrial, where available) Mobility in soil	No data av No data av			
13. DISPOSAL CONSIDERAT	IONS			
Safe Handling of Waste		characteristics of the	ne material to deter	determine the toxicity and physical nine the proper waste ce with applicable regulations.
14. TRANSPORT INFORMAT	ION			
This section provides basic shi details. Refer to all applicable i requirements and restrictions. DOT Basic Description:	regulations fo		ional, air, vessel an	
Marine Pollutant: 15. REGULATORY INFORMA	No			
		roduct are either list	ed on the TSCA In	ventory; or, are not subject to the
	otification rec			
Regulated Components SARA EHS Chemicals Not applicable		<u>CAS #</u>	<u>%</u>	
CERCLA Methylene diisocyanate		101-68-8	40 - 60	
SARA 313 Polymeric diphenylmethane d Methylenebis(phenylisocyana		9016-87-9 101-68-8	40 - 60 40 - 60	
Health (chronic): Fire (Flammable): Pressure:	Y Y N N Y			
U. S. State Regulations: California Prop 65 Chemicals Cancer	<u>s</u>	<u>CAS #</u>	<u>%</u>	
Not applicable Reproductive Not applicable				
Canadian Regulations:				

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

16. OTHER INFORMATION

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Disclaimer01-11-2016
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.