

Safety Data Sheet

Revision Date: 06-09-2015
Product Code: 70620-CA

1. IDENTIFICATION

Product Name	PERMATHANE FR BASECOAT DARK GRAY
Product Code	70620-CA
Document ID	G70620-CA
Revision Number	1
Prior Version Date	None
Intended Use	Roof Coating, Urethane
Restrictions On Use	For Industrial Use Only
Chemical Family	Urethane Coating
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
Flammable Liquid Category 3
Acute Toxicity - Inhalation Vapour Category 3

Signal Word

Danger

Hazard Statements

Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 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. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fume, mist, vapours or spray. Wash thoroughly

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Response	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. Use personal protective equipment as required. In case of inadequate ventilation wear respiratory protection.
	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Get medical attention 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. In case of fire: Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray for extinction.
Storage	Store locked up. Store in a cool, well-ventilated place. Keep container tightly closed.
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 #	%
Polyisocyanate Resin	9057-91-4	10 - 30
Parachlorobenzotrifluoride (PCBTF)	98-56-6	7 - 13
Quartz (Silica-Crystalline)	14808-60-7	1 - 5
Acetone	67-64-1	1 - 5
Fumed silica	112945-52-5	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Toluene diisocyanate	26471-62-5	0.1 - 1

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

4. FIRST-AID MEASURES

Inhalation	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. 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. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

Most Important Acute Symptoms Not Available

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and Effects

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 resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and minimize fire damage.
Unsuitable Extinguishing Media	No data available
Fire and/or Explosion Hazards	Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Container may explode in heat of fire.
Hazardous Combustion Products	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Toxic fumes, Isocyanates, Isocyanic Acid
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. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section VIII of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.
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. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Do not get in eyes, on skin and clothing. Wash thoroughly after handling.
Conditions for Safe Storage	Store in a cool dry place. Keep container(s) closed. Keep away from sources of ignition.
Materials to Avoid/Chemical Incompatibility	Oxidizing agents, Acids, Metals, Amines, Caustics (bases, alkalis), Water, Alcohols

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Exposure Limits

Chemical Component	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL
Quartz (Silica-Crystalline)	see Table Z-3	0.05 mg/m ³ TWA (respirable fraction)	
Acetone	1000 ppm TWA; 2400 mg/m ³ TWA	500 ppm TWA; 1188 mg/m ³ TWA	750 ppm STEL; 1782 mg/m ³ STEL
Fumed Silica (Particles not otherwise regulated)	50 mppcf (15mg/m ³) TWA Total Dust; 15 mppcf (5mg/m ³) TWA Respirable fraction		
Titanium dioxide	15 mg/m ³ TWA (total dust)	10 mg/m ³ TWA	
Toluene diisocyanate		0.005 ppm TWA	0.02 ppm

Appropriate Engineering Controls

Local exhaust ventilation or other engineering controls may be required when handling or using this product to avoid overexposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910.

Respiratory Protection

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

Wear safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Have an eye wash station available.

Skin Protection

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. Do not get in eyes, on skin and clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Liquid
Color	Grey
Odor	Naphthalene-Like
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)	276.8
High (°F)	280.4
Flash Point (°F/°C)	78 / 26
Evaporation Rate	0.90
Flammability (solid, gas)	No data available
Upper Flammable/Explosive Limit	10.5

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Lower Flammable/Explosive Limit	0.9
Vapor Pressure	5.30
Vapor Density	6.20 (air = 1)
Relative Density	2.400
Solubility in Water	Negligible; 0-1% Reacts slowly with water.
Partition coefficient: n-octanol/water	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature:	No data available
Viscosity	100 - 115 KU
Volatiles, % by volume	22.47
Volatiles, % by weight	18.44
Volatile Organic Chemicals (g/L)	
(Regulatory, Calculated)	38.40
(Actual, Calculated)	31.18
Density	11.20 - 11.40 lbs./Gal

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	Sparks, open flame, other ignition sources, and elevated temperatures. Elevated temperatures. Contamination. Contact with water.
Incompatible Materials	Oxidizing agents, Acids, Metals, Amines, Caustics (bases, alkalis), Water, Alcohols
Hazardous Decomposition Products	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Toxic fumes, Hydrogen chloride

11. TOXICOLOGICAL INFORMATION

Routes of Exposure	Inhalation Eye contact Ingestion Skin contact
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Immediate (Acute) Health Effects by Route of Exposure

Inhalation Irritation	Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.
Inhalation Toxicity	Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea.
Skin Contact	Causes skin irritation. Sensitizer. Avoid exposure. If sensitized, repeated exposures will result in irritation, reddening, and rashes even for very low exposures.
Eye Contact	Causes eye irritation.
Ingestion Toxicity	Harmful if swallowed.

Long-Term (Chronic) Health Effects

Carcinogenicity	Cancer hazard: Contains Crystalline Silica, which can cause cancer. Risk of cancer depends on duration and level of exposure to dust generated from sanding surfaces or spray mists. Contains Titanium Dioxide which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence with respect to humans and sufficient evidence in experimental animals. Possible cancer hazard. Contains toluene diisocyanate which may cause cancer based on animal data. (Risk of cancer depends on duration and level of exposure.)
Inhalation	Isocyanate vapors or mist at concentrations above the TLV can irritate the mucous membranes in the respiratory tract causing runny nose, sore throat,

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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.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Overexposure may cause lung damage.

Prolonged contact may cause an allergic skin reaction.

Skin Contact

Product Toxicology Data

Oral Acute Toxicity Estimate (ATE) 2,780.01 mg/kg

Dermal Acute Toxicity Estimate (ATE) 4,837.25 mg/kg

Component Toxicology Data

Chemical Component	Oral LD50	Dermal LD50	Inhalation LC50
1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 1,3-diisocyanatomethylbenzene and alpha.-hydro- omega. -hydroxypoly[oxy(methyl-1,2-ethanediyl)]	Oral LD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 5000 mg/kg	Inhalation LC50 (4h) Rat > 20.00 mg/L
Parachlorobenzotrifluoride (PCBTF)	Oral LD50 Rat 11,500 mg/kg		Inhalation LC50 Rat 20.00 g/m3
Quartz	Oral LD50 Rat > 22,500 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat > 20.00 mg/L
Acetone	Oral LD50 Rat 5800 mg/kg	Dermal LD50 Rabbit > 16 g/kg	Inhalation LC50 (4h) Rat 76.00 mg/L
Fumed silica	Oral LD50 Rat > 1000 mg/kg		
Titanium dioxide	Oral LD50 Rat > 25,000 mg/kg	Dermal LD50 Rabbit > 10,000 mg/kg	Inhalation LC50 (4h) Rat > 6.82 mg/L
Toluene diisocyanate	Oral LD50 Rat 6170 mg/kg	Dermal LD50 Rabbit > 16,000 mg/kg	Inhalation LC50 (4h) Rat 0.10 mg/L

Carcinogen Information

Chemical Name	IARC Carcinogen	OSHA Carcinogen	NTP Carcinogen
Quartz	1		1
Titanium dioxide	2B		
Toluene diisocyanate	2B		2

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.

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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: Paint
Hazard Class: 3
UN Number: UN1263
Packing Group: III
Other: This product qualifies for a limited quantity exception per CFR173.150(b)(3) for inner containers <= 1.3 gallons (5L) and total gross package wt <= 66 lbs (30kg).

Marine Pollutant: No

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

SARA EHS Chemicals

	<u>CAS #</u>	<u>%</u>
Toluene Diisocyanate	26471-62-5	0.1 - 1

CERCLA

Acetone	67-64-1	1 - 5
Toluene Diisocyanate	26471-62-5	0.1 - 1

SARA 313

Toluene diisocyanate (mixed isomers)	26471-62-5	0.1 - 1
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SARA 311/312

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

U. S. State Regulations:

California Prop 65 Chemicals

Cancer

	<u>CAS #</u>	<u>%</u>
Crystalline Silica	14808-60-7	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Toluene Diisocyanate	26471-62-5	0.1 - 1
Carbon Black	1333-86-4	0.01 - 0.1
Cumene	98-82-8	0.01 - 0.1
Benzene	71-43-2	0.001- 0.01
Arsenic	7440-38-2	< 10 ppb
Lead	7439-92-1	< 10 ppb
Nickel	7440-02-0	< 10 ppb

Reproductive

Methyl Alcohol	67-56-1	0.001- 0.01
Benzene	71-43-2	0.001- 0.01
Lead	7439-92-1	< 10 ppb

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Canadian Regulations:

CEPA DSL: The components of this product ARE listed on the Canadian Domestic Substances List.
WHMIS Hazard Class: B2 D2A

16. OTHER INFORMATION

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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.