

MATERIAL SAFETY DATA SHEET

70611

I PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	PERMATHANE TOP COAT GRAY
PRODUCT CODE	70611
DOCUMENT ID	M70611
CHEMICAL FAMILY	Urethane Coating
REVISION NUMBER	4
REVISION DATE	26-06-2014
PRIOR VERSION DATE	05-01-2012
COMPANY:	NEOGARD® - DIVISIÓN DE JONES-BLAIR® COMPAÑÍA 2728 Empire Central Dallas, TX 75235
INTERNATIONAL:	2143531600
EMERGENCY CONTACT	Chemtrec Center
EMERGENCY PHONE	1-800-424-9300

II HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	DANGER! Combustible liquid and vapor. Causes skin irritation. Causes eye irritation. Harmful if inhaled. Vapor and spray mist harmful. Causes nose and throat irritation. Overexposure may cause lung damage. May cause allergic skin and respiratory reaction. Effects may be permanent.
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AL-KOAT^{MR}
IMPERMEABILIZANTES

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ROUTES OF ENTRY:	<ul style="list-style-type: none"> • Inhalation • Eye contact • Skin contact • Ingestion
TARGET ORGANS POTENTIALLY AFFECTED BY EXPOSURE:	<ul style="list-style-type: none"> • Respiratory Tract • Skin • Central nervous system • Eyes • Lungs • Liver • Kidneys
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE	<ul style="list-style-type: none"> • Skin allergies. • Individuals with lung or breathing problems or prior reaction to isocyanates must not be exposed to vapor or spray mist. • Respiratory disorders, including but not limited to asthma and bronchitis. • Eye irritation when/if dust or spray mist is generated. • Eye disorders. • Lung disease

Immediate (Acute) Health Effects by Route of Exposure:

INHALATION IRRITATION	<p>Inhalation of dusts produced during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.</p>
INHALATION TOXICITY	<p>Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea</p>
SKIN CONTACT	<p>Can cause moderate skin irritation. Sensitizer. Avoid exposure. If sensitized, repeated exposures will result in irritation, reddening, and rashes even for very low exposures. May cause allergic skin reaction.</p>
SKIN ABSORPTION	<p>May be harmful if absorbed through skin.</p>
EYE CONTACT	<p>Causes eye irritation</p>
INGESTION TOXICITY	<p>Harmful if swallowed</p>

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Long-Term (Chronic) Health Effects

<p>CARCINOGENICITY</p>	<p>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.</p> <p>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.</p> <p>Possible cancer hazard. Contains toluene diisocyanate which may cause cancer based on animal data. (Risk of cancer depends on duration and level of exposure.)</p>
<p>INHALATION</p>	<p>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.</p> <p>Repeated overexposure causes sensitization in some individuals resulting in asthma-like symptoms on subsequent exposures below the TLV.</p> <p>Persons with preexisting bronchial hyperactivity can respond to concentrations below the TLV with similar symptoms as well as an asthma attack.</p> <p>Overexposure may cause lung damage.</p> <p>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.</p>
<p>SKIN CONTACT</p>	<p>Prolonged contact may cause an allergic skin reaction</p>

III COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	%	CAS #
Quartz (Silica-Crystalline)	10 - 30	14808-60-7
1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 1,3-diisocyanatomethylbenzene and alpha.-hydro- omega. hydroxypoly[oxy(methyl-1,2-ethanediyl)]	10 - 30	9040-80-6

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Polyisocyanate Resin	10 - 30	9057-91-4
Stoddard Solvent	3 - 7	8052-41-3
Titanium Dioxide	3 - 7	13463-67-7
Butyl Carbitol Acetate	3 - 7	124-17-4
Fumed Silica (Particles not Otherwise Regulated)	1 - 5	67762-90-7
Light Aromatic Solvent Naphtha	0.5 - 1.5	64742-95-6
(D)-Limonene	0.5 - 1.5	5989-27-5
Toluene Diisocyanate	0.1 - 1	26471-62-5

IV 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.
EYES	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. Thoroughly wash or discard clothing and shoes before reuse.
INGESTION:	If swallowed, do not induce vomiting. Get medical attention immediately.
NOTES TO DOCTOR	No additional first aid information available

V FIRE FIGHTING MEASURES

FLAMMABILITY SUMMARY	Combustible liquid and vapor
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EXTINGUISHING MEDIA	Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.
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. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death.
FIRE FIGHTING METHODS AND PROTECTION	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. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.
HAZARDOUS COMBUSTION PRODUCTS	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Hydrocarbons, Toxic fumes, Toxic gases, Isocyanates, Isocyanic Acid.
FLASH POINT (°F/°C)	109 / 43
AUTOIGNITION TEMPERATURE (°F/°C):	439.0 / 226.0
LOWER FLAMMABLE/EXPLOSIVE LIMIT, % IN AIR:	0.8
UPPER FLAMMABLE/EXPLOSIVE LIMIT, % IN AIR:	10.7

VI ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EQUIPMENT	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in
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	Section VIII of this MSDS. 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 FOR CLEAN-UP	Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. 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.

VII HANDLING AND STORAGE

HANDLING TECHNICAL MEASURES AND PRECAUTIONS	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. Wash thoroughly after handling. Do not get in eyes, on skin and clothing
STORAGE TECHNICAL MEASURES AND CONDITIONS	Store in a cool dry place. Keep container(s) closed. Keep away from sources of ignition

VIII EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES	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 chemically resistant safety glasses with side shields when

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	<p>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</p>
SKIN PROTECTION	<p>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. Wear chemical resistant gloves.</p>

Parametros de Control

NOMBRE QUÍMICO	ACGIH TLV-TWA	ACGIH STEL	LÍMITES DE EXPOSICIÓN- OSHA
Quartz (Silica-Crystalline)	0.05 mg/m TWA (respirable fraction)		See Table Z-3
Stoddard Solvent	100 ppm TWA; 572 mg/m TWA		500 ppm TWA; 2900 mg/m TWA
Titanium Dioxide	10 mg/m TWA		15 mg/m TWA (total dust)
Fumed Silica (Particles Not Otherwise Regulated)			50 mppcf (15mg/m) TWA Total Dust; 15 mppcf (5mg/m) TWA Respirable fraction
Toluene Diisocyanate	0.005 ppm TWA	0.02 ppm	

IX PROPIEDADES FÍSICAS Y QUÍMICAS

COLOR	GREY
PHYSICAL STATE	LIQUID

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BOILING POINT - (°F)	Low - 315° C High - 456° C
EVAPORATION RATE	0
ODOR	Hydrocarbon
PH	N/A
VAPOR DENSITY	7.00 (air = 1)
VAPOR PRESSURE	68° F 0.52 MM HG
VOC (G/L) (REGULATORY, CALCULATED)	211.10
VOC (G/L) (ACTUAL, CALCULATED)	211.07
VISCOSITY	105 – 115 KU
SOLUBILITY IN WATER	Reacts slowly with water
OCTANOL/WATER PARTITION COEFFICIENT	Not Available
VOLATILES, % BY VOLUME (CALCULATED)	24.73
VOLATILES, % BY WEIGHT (CALCULATED)	16.79
DENSITY	10.38 - 10.58 lbs./Gal.
Physical and Chemical Properties are calculated target or range values for single packaged items and do not represent compliance values for multi-component (mixed) systems.	

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X STABILITY AND REACTIVITY

STABILITY	Stable under normal conditions
CONDITIONS TO AVOID	Temperatures above flash point in combination with sparks, open flames, or other sources of ignition. Contamination. Contact with water.
MATERIALS TO AVOID/CHEMICAL INCOMPATIBILITY	Oxidizing agents, Metals, Acids, Amines, Caustics (bases, alkalis), Water, Alcohols
POLYMERIZATION	Contact with moisture, other materials that react with isocyanates or temperatures above 350 F may cause polymerization.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon dioxide, Carbon monoxide, Hydrogen cyanide, Nitrogen containing gases, Hydrocarbons, Toxic fumes, Toxic gases, Hydrogen chloride

XI TOXICOLOGICAL INFORMATION

Component Toxicology Data

Chemical Name	CAS Number	LD50/LC50
Quartz	14808-60-7	Oral LD50 Rat > 22,500 mg/kg
Stoddard Solvent	8052-41-3	Oral LD50 Rat > 5 g/kg Inhalation LC50 Rat > 6 mg/L
Titanium Dioxide	13463-67-7	Oral LD50 Rat > 25 g/kg Dermal LD50 Rabbit > 10 g/kg Inhalation LC50 (4h) Rat > 7 mg/L
Butyl Carbitol Acetate	124-17-4	Oral LD50 Rat 6960 - 11,960 mg/kg LD50 D�rmica conejo 5390 - 14500 mg/kg
Fumed Silica	67762-90-7	Oral LD50 Rat > 1000 mg/kg

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Light Aromatic Solvent Naphtha	64742-95-6	Oral LD50 Rat 8400 mg/kg Dermal LD50 Rat > 2 g/kg Inhalation LC50 (4h) Rat 6 - 10 mg/L
Toluene Diisocyanate	26471-62-5	Dérmico LD50 Rabbit > 9400 mg/kg Oral LD50 Rat 4130 - 5110 mg/kg Inhalación LC50 (1h) Rat 66 ppm

Carcinogens

Chemical Name	CAS Number	IARC	NTP	OSHA
Quartz	14808-60-7	1	1	
Titanium Dioxide	13463-67-7	2B		
Toluene Diisocyanate	26471-62-5	2B	2	

XII ECOLOGICAL INFORMATION

Toxicity data, if available, are listed below

OVERVIEW	No data available
MOBILITY	No data available

XIII DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:	Refer to other sections of this MSDS 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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XIV TRANSPORTATION 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.

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DOT Basic Description	Paint
Hazard Class	3
UN Number	UN1263
Packing Group	III
Other: Not regulated for non-bulk domestic ground shipments for packaging of 450 liters (119 gallons) or less (DOT 49CFR 173.150(f)).	
Marine Pollutant: NO	

XV REGULATORY INFORMATION

United States Federal Regulations:

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

	CAS #	%
SARA EHS Chemicals Toluene Diisocyanate	26471-62-5	0.1 - 1
CERCLA Toluene Diisocyanate	26471-62-5	0.1 - 1
SARA 313 2-(2-Butoxyethoxy)ethyl acetate	124-17-4	3 - 7
Toluene diisocyanate (mixed isomers)	26471-62-5	0.1 - 1
SARA 311/312 Health (Acute): Y Health (chronic): Y Fire (Flammable): Y Pressure: N Reactivity: Y		

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U. S. State Regulations: California Prop 65 Chemicals

CANCER	CAS #	%
Crystalline Silica	14808-60-7	10 - 30
Titanium Dioxide	13463- 67- 7	3 - 7
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	< 10 ppb
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	< 10 ppb
Lead	7439-92-1	< 10 ppb

Canadian Regulations:

CEPA DSL	The components of this product ARE listed on the Canadian Domestic Substances List.
WHMIS HAZARD CLASS	B3 D2A

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XVI ADDITIONAL INFORMATION

PREPARED BY	Regulatory Department
DISCLAIMER	This MSDS 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.
PRINT DATE	06/Nov./2013

RIESGO DE INFLAMABILIDAD

0 / No arde
1 / Arde a (+) DE 93°C
3 / Arde a (-) de 37°C
4 / Arde a (-) DE 25°C

PELIGRO PARA LA SALUD

0 / Normal
1 / Poco peligroso
2 / Peligroso
3 / Muy peligroso
4 / Mortal

RIESGO POR REACTIVIDAD

0 / Estable
1 / Inestable al calentamiento
2 / Cambio químico violento
3 / Puede explotar por choque o calentamiento
4 / Puede explotar

