

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** **POR-15 Rust Preventive Paint**  
**Product Use/Restriction:** Paint  
**Manufacturer Name:** POR-15, Inc.  
**Address:** P.O. Box 1235  
Morristown, NJ 07962-1235  
**General Phone Number:** 800-457-6715  
**Customer Service Phone Number:** 973-887-1999  
**Technical Product Information:** 800-457-6715  
**Emergency Phone Number:** 1-800-457-6715  
**CHEMTREC:** For emergencies in the US, call CHEMTREC: 800-424-9300  
**MSDS Creation Date:** December 02, 2008  
**MSDS Revision Date:** December 02, 2008  
**MSDS Format:** ANSI

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
<u>&lt;u&gt;POR-15 Black, Silver, Gray, and Clear&lt;/u&gt;</u>			
Polyisocyanate Prepolymer based on MDI	Proprietary	40 - 60 by weight	
Naptha Petroleum	64742-94-5	25 - 35 by weight	
Diphenylmethane Diisocyanate (MDI) mixed isomers	26447-40-5	3 - 4 by weight	
Polymeric Diphenylmethane Diisocyanate(pMDI)	9016-87-9	2 - 3 by weight	
  <u>POR-15 POR-15 Semi Gloss Black</u>			
Aromatic Polyisocyanate based on MDI	Proprietary	40 - 60 by weight	
Naptha Petroleum	64742-94-5	25 - 35 by weight	
Diphenylmethane Diisocyanate (MDI) mixed isomers	26447-40-5	3 - 4 by weight	
Polymeric Diphenylmethane Diisocyanate(pMDI)	9016-87-9	2 - 3 by weight	

## SECTION 3 - HAZARDS IDENTIFICATION

**Route of Exposure:**

**Potential Health Effects:** Eyes: Severe irritation; tearing skin, discoloration-drying; breathing: irritation, dizziness, unconsciousness (for solvent).

For isocyanates: Coughing, irritation of mucous membranes and respiratory tract.

SKIN EFFECTS: Slight to moderate irritation(MDI); skin sensitizer in guinea pigs(MDI).

No conclusive evidence has been developed to indicate that MDI or POR-15 is carcinogenic, teratogenic or that either one causes reproductive effects in animals or humans. MDI has been reported by NIOSH to be mutagenic to Salmonella Typhimurium bacteria in the presence of a mammalian liver activation system. There is not full agreement in the scientific community on the significance of these Ames test results and their relationship to human safety in assessing the risk of cancer in man. A commitment has been made to perform an animal life-time inhalation study on polymeric MDI.

**Eye:** HUMAN EFFECTS OF OVEREXPOSURE:  
Liquid, vapors, or aerosols are irritating to the eyes and can cause lachrymation (tearing effect). Corneal damage can occur; however, indications are that the damage is reversible and does not result in permanent injury.

**Skin:** HUMAN EFFECTS OF OVEREXPOSURE:  
Polymeric MDI reacts with skin protein and tissue moisture and can cause localized irritation as well as discoloration. Prolonged contact could produce reddening, swelling, or blistering and, in some individuals, skin sensitization resulting in dermatitis.

**Inhalation:** HUMAN EFFECTS OF OVEREXPOSURE:  
Inhalation of MDI vapors or aerosols in concentrations above 0.02 ppm can produce irritation of the mucous membranes in the respiratory tract, running nose, sore throat, productive cough and a reduction of lung function. Extensive exposures to concentrations well above the TLV could lead to bronchitis, bronchial spasm and pulmonary edema. These effects are usually reversible. However, due to low volatility, high exposures are not anticipated except if the material is overheated or sprayed as an aerosol into the air. Hypersensitivity pneumonitis has also been reported. Another type of response is hyperreactivity or

hypersensitization. Persons with a preexisting unspecific bronchial hyperreactivity or persons with a specific isocyanate hype rsensitivity (as a result of previous repeated overexposure or a single large dosage)will respond to small isocyanate concentrations at levels well below the TLV of 0.02 ppm. Symptoms could be immediate or delayed and include chest tightness, respiratory distress or asthmatic attack.

**Ingestion:**

**HUMAN EFFECTS OF OVEREXPOSURE:**

Ingestion could result in irritation and some corrosive action in the mouth, stomach tissue and digestive tract. However, it is not considered a common occupational route of exposure.

**Chronic Health Effects:**

**Signs/Symptoms:**

**Target Organs:**

**Aggravation of Pre-Existing Conditions:**

**SECTION 4 - FIRST AID MEASURES**

**Eye Contact:**

Immediately flush eyes with plenty of water for 15 to 20 minutes occasionally lifting eyelids. Get medical attention, if irritation or symptoms of overexposure persists.

**Skin Contact:**

Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash contaminated clothing thoroughly before re-use.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention if necessary. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Treatment is essentially symptomatic.

**Ingestion:**

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Give 250 ml of milk or water to drink. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Consult physician.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Flammable Properties:**

Combustible liquid. At elevated temperatures, vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back.

1B

**Flash Point:**

40°C (104°F)

**Flash Point Method:**

TCC

**Lower Flammable/Explosive Limit:**

1%

**Upper Flammable/Explosive Limit:**

7.1%

**Fire Fighting Instructions:**

Use cold water to cool fire-exposed containers.

**Extinguishing Media:**

Dry chemical (e.g. monoammonium phosphate, potassium sulfate, and potassium chloride), carbon dioxide, high expansion (proteinic) chemical foam, sand.

**Protective Equipment:**

As in any fire wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Unusual Fire Hazards:**

During a fire, MDI vapors and other irritating, toxic gases may be generated by thermal decomposition (see section 7). At temperatures greater than 400 deg F (204 deg C), polymeric MDI can polymerize and decompose.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personnel Precautions:**

**Environmental Precautions:**

**Spill Cleanup Measures:**

Eliminate source of ignition of vapors, wear protective clothing while cleaning up; absorb on sand, clay, or absorbent material.

**Other Precautions:**

**SECTION 7 - HANDLING and STORAGE**

**Handling:**

**Storage:**

STORAGE TEMPERATURE (min/max): 32 deg F (0 deg C)/122 deg F (50 deg C)

AVERAGE SHELF LIFE: 6 months to 2 years (unopened can) @ 77 deg F (25 deg C)

**SPECIAL SENSITIVITY (heat, light, moisture):**

If container is exposed to high heat, container may pressurize slightly. If container is opened and used as supply can, do not re-seal can as pressure may build up due to reaction producing carbon dioxide, which might cause re-sealed container to pressurize and burst.

Store in tightly closed container and protect from moisture and foreign materials. At maximum storage temperatures noted, material may slowly polymerize without hazard. Ideal storage temperature range is 50-81 deg F (10-27 deg C).

**Work Practices:**

**Special Handling Procedures:**

**Hygiene Practices:**

<b>Engineering Controls:</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ventilation as required to maintain air concentrations below exposure standards. If material is spray-applied, ventilation should be provided and air supplied respirators worn. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.
<b>Eye/Face Protection:</b>	Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166. Contact lenses should not be worn.
<b>Skin Protection Description:</b>	Cover as much of the exposed skin area as possible with appropriate clothing. If skin creams are used, keep the area covered to a minimum. & dbo_Section8.HandProtectionDescription
<b>Respiratory Protection:</b>	A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister approved for use in isocyanate containing environments may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. In spray applications you must protect against exposure to both vapor and spray mist. An air-supplied respirator is strongly recommended for spray application. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
<b>Other Protective:</b>	Eyewash and deluge shower should be available.

**EXPOSURE GUIDELINES**

Notes :

**SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES**

<b>Physical State Appearance:</b>	Liquid
<b>Color:</b>	Black
<b>Odor:</b>	Aromatic
<b>Boiling Point:</b>	111°C (232°F)
<b>Density:</b>	8.9 pounds/gallon
<b>Specific Gravity:</b>	1.6 (Water = 1)
<b>Solubility:</b>	Nil in water
<b>Vapor Density:</b>	4.5 (Air = 1)
<b>Vapor Pressure:</b>	38 mm Hg
<b>Percent Volatile:</b>	Clear 34.6 % Silver 35.1 % Black 36 % Grey 38.1 % Semi Gloss 32.8 %
<b>Evaporation Point:</b>	For solvent: 4.5 (Ether = 1)
<b>Viscosity:</b>	200-500 CPS @ 25°C (77°F)
<b>Flash Point:</b>	40°C (104°F)
<b>Flash Point Method:</b>	TCC
<b>VOC Content:</b>	For POR-15 Clear: 301 grams per liter For POR-15 Silver: 325 grams per liter For POR-15 Black: 294 grams per liter For POR-15 Grey: 333 grams per liter For POR-15 Semi gloss: 270 grams per liter

**SECTION 10 - STABILITY and REACTIVITY**

<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Reactivity:</b>	
<b>Hazardous Polymerization:</b>	Will not occur in unopened cans under normal conditions.
<b>Conditions to Avoid:</b>	Temperatures below 0°C (32°F) or above 50°C (122°F). To maintain freshness: Avoid contact with water, alcohols, amines, strong bases, metal compounds or surface active materials.
<b>Incompatible Materials:</b>	
<b>Special Decomposition Products:</b>	

**SECTION 11 - TOXICOLOGICAL INFORMATION****Naptha Petroleum :**

<b>Skin:</b>	Skin - Rabbit Standard Draize Test.: 500 uL/24H - [mild](RTECS) Skin - Rabbit LD50: >2 mL/kg - [Behavioral - somnolence (general depressed activity) Behavioral - changes in motor activity (specific assay) Behavioral - irritability](RTECS)
<b>Inhalation:</b>	Inhalation - Rat LC50: >590 mg/m <sup>3</sup> /4H - [Details of toxic effects not reported other than lethal dose value.] (RTECS)
<b>Ingestion:</b>	Oral - Rat LDLo: 5 mL/kg - [Sense Organs and Special Senses (Olfaction) - effect, not otherwise specified Sense Organs and Special Senses (Eye) - effect, not otherwise specified Skin and Appendages - hair] (RTECS)

**Polymeric Diphenylmethane Diisocyanate(pMDI) :**

**Eye:** Eye - Rabbit Standard Draize Test.: 100 mg [mild]  
**Skin:** Oral - Rat LD50 : 49 gm/kg [Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Nutritional and Gross Metabolic - Body temperature decrease]  
Administration onto the skin - Rabbit LD50 : >9400 mg/kg [Details of toxic effects not reported other than lethal dose value.]  
**Inhalation:** Inhalation - Rat LC50 : 490 mg/m3/4H [Sense Organs and Special Senses (Eye) - effect, not otherwise specified Lungs, Thorax, or Respiration - Respiratory depression Blood - Hemorrhage]  
**Ingestion:** Oral - Rat LD50 : 49 gm/kg [Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Nutritional and Gross Metabolic - Body temperature decrease]

**Naptha Petroleum :**

**Skin:** Skin - Rabbit Standard Draize Test.: 500 uL/24H - [mild](RTECS)  
Skin - Rabbit LD50: >2 mL/kg - [Behavioral - somnolence (general depressed activity) Behavioral - changes in motor activity (specific assay) Behavioral - irritability](RTECS)  
**Inhalation:** Inhalation - Rat LC50: >590 mg/m3/4H - [Details of toxic effects not reported other than lethal dose value.] (RTECS)  
**Ingestion:** Oral - Rat LDLo: 5 mL/kg - [Sense Organs and Special Senses (Olfaction) - effect, not otherwise specified Sense Organs and Special Senses (Eye) - effect, not otherwise specified Skin and Appendages - hair] (RTECS)

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**Ingestion:** Oral - Rat LD50 : 49 gm/kg [Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Nutritional and Gross Metabolic - Body temperature decrease]

**SECTION 12 - ECOLOGICAL INFORMATION**

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**SECTION 14 - TRANSPORT INFORMATION**

**DOT Shipping Name:** Paint  
**DOT UN Number:** UN1263  
**DOT Hazard Class:** 3  
**DOT Packing Group:** III

**SECTION 15 - REGULATORY INFORMATION**

**Naptha Petroleum :**

**TSCA Inventory Status:** Listed

**Diphenylmethane Diisocyanate (MDI) mixed isomers :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Polymeric Diphenylmethane Diisocyanate(pMDI) :**

**TSCA Inventory Status:** Listed

**Naptha Petroleum :**

**TSCA Inventory Status:** Listed

**Diphenylmethane Diisocyanate (MDI) mixed isomers :**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Polymeric Diphenylmethane Diisocyanate(pMDI) :**

**TSCA Inventory Status:** Listed

**SECTION 16 - ADDITIONAL INFORMATION**

**MSDS Creation Date:** December 02, 2008  
**MSDS Revision Date:** December 02, 2008

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