

MATERIAL SAFETY DATA SHEET



**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

**Matthews Paint Company**  
 Lake View Corporate Park  
 8201 - 100th St.  
 Pleasant Prairie, WI 53158

**EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.)**  
 (24 hours/day):

(514) 645-1320 (Canada)  
 01-800-00-21-400 (Mexico)  
 0532-3889090 (China)

**TECHNICAL** 1-800-323-6593

**INFORMATION:**

**PRODUCT SAFETY/MSDS INFORMATION:** (412) 492-5555 7:00 a.m.  
 - 4:30 p.m. EST

**Product ID:** 274909SP (0808)

**PRODUCT NAME:** EPOXY HARDENER

**SYNONYMS:** None

**ISSUE DATE:** 09/23/2005

**EDITION NO.:** 1

**CHEMICAL** Polyamide

**FAMILY:**

**EMERGENCY OVERVIEW:**

Flammable. Keep away from heat, sparks, flames, and other sources of ignition. Do not smoke. Extinguish all flames and pilot lights. Turn off stoves, heaters, electrical motors, and other sources of ignition during use and until all vapors/odors are gone. CAUSES IRREVERSIBLE EYE DAMAGE. MAY CAUSE SKIN BURNS. MAY BE ABSORBED THROUGH THE SKIN. PROLONGED OR REPEATED CONTACT MAY CAUSE AN ALLERGIC SKIN REACTION. VAPOR AND/OR SPRAY MIST HARMFUL IF INHALED. VAPOR IRRITATES EYES, NOSE, AND THROAT. HARMFUL OR FATAL IF SWALLOWED.

**SECTION 2 - COMPOSITION INFORMATION**

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

| Material/<br>CAS Number                                  | Percent | Hazardous |
|--|---------|-----------|
| AROMATIC HYDROCARBON<br>64742-94-5                       | 15 - 40 | X         |
| XYLENES<br>1330-20-7                                     | 7 - 13  | X         |
| NAPHTHALENE<br>91-20-3                                   | 1 - 5   | X         |
| ETHYL BENZENE<br>100-41-4                                | 1 - 5   | X         |
| 2,4,6 TRIS<br>(DIMETHYLAMINOMETHYL)<br>PHENOL<br>90-72-2 | 1 - 5   | X         |

**SECTION 3 - HAZARDS IDENTIFICATION**

**ACUTE OVEREXPOSURE EFFECTS**

**EYE CONTACT:**

This product contains a material which causes irreversible eye damage. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

**SKIN CONTACT:**

May cause skin burns. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

**SKIN ABSORPTION:**

May be absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

**INHALATION:**

Vapor and/or spray mist harmful if inhaled. Vapor irritates eyes, nose, and throat.

**INGESTION:**

Harmful or fatal if swallowed.

**SIGNS & SYMPTOMS OF OVEREXPOSURE:**

Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Not applicable.

**CHRONIC OVEREXPOSURE EFFECTS**

Avoid long-term and repeated contact.

Repeated exposure to vapors above recommended exposure limits (see Section 8) may cause irritation of the respiratory system and permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. Prolonged inhalation of an ingredient(s) in this product may cause edema of the lungs and/or lung damage. Naphthalene has caused nasal and lung tumors in laboratory animals exposed via inhalation. Absorption of naphthalene into the body by inhalation, ingestion or through the skin can lead to the formation of methemoglobin, thereby imparting a bluish tint to the skin and mucous membranes (cyanosis). Onset of cyanosis may be delayed. Exposure to naphthalene vapors at 15 ppm or above can cause eye irritation, corneal injury, optical neuritis and cataracts. Ingestion of naphthalene can cause hemolytic anemia and hemoglobinuria, especially in glucose-6-phosphate dehydrogenase deficient individuals. High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo and fetus. These effects were often at levels toxic to the mother.

The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

**SECTION 4 - FIRST AID MEASURES**

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

**EYE CONTACT:**

Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

**SKIN CONTACT:**

Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

**INHALATION:**

Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

**INGESTION:**

Gently wipe or rinse the inside of the mouth with water. Sips of water may be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room or physician right away as further treatment may be necessary.

#### SECTION 5 - FIRE FIGHTING MEASURES

##### FLAMMABLE PROPERTIES

**FLASHPOINT:** 81 Degrees F ( 27 Degrees C)

##### FLASHPOINT TEST METHOD:

Pensky-Martens Closed Cup

**UEL:** Not Available.

**LEL:** 1.0

##### AUTOIGNITION TEMPERATURE:

Not Available.

##### EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IC flammable liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

##### PROTECTION OF FIREFIGHTERS:

Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

##### UNUSUAL FIRE AND EXPLOSION HAZARDS:

Keep this product away from heat, sparks, flame, and other sources of ignition (i.e., pilot lights, electric motors, static electricity). Invisible vapors can travel to a source of ignition and flash back. Do not smoke while using this product. Keep containers tightly closed when not in use. Closed containers may explode when overheated. Do not apply to hot surfaces. Toxic gases may form when this product comes in contact with extreme heat. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURE

##### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

#### SECTION 7 - HANDLING AND STORAGE

##### PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:

Vapors may collect in low areas. If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts. Containers should be grounded when pouring. Avoid free fall of liquids in excess of a few inches.

##### STORAGE:

Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IC flammable liquids.

#### SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

##### ENGINEERING CONTROLS:

Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

##### PERSONAL PROTECTIVE EQUIPMENT

###### EYES:

Wear chemical-type splash goggles and full face shield when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapors.

##### SKIN/GLOVES:

Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: nitrile rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.

##### RESPIRATOR:

Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH- approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure, air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

##### GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS

If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

| Material/<br>CAS Number   | Percent | ACGIH TLV | ACGIH<br>STEL | OSHA PEL | OSHA<br>STEL |
|---------------------------|---------|-----------|---------------|----------|--------------|
| XYLENES<br>1330-20-7      | 7 - 13  | 100 ppm   | 150 ppm       | 100 ppm  | 150 ppm      |
| NAPHTHALENE<br>91-20-3    | 1 - 5   | S- 10 ppm | 15 ppm        | 10 ppm   | 15 ppm       |
| ETHYL BENZENE<br>100-41-4 | 1 - 5   | 100 ppm   | 125 ppm       | 100 ppm  | 125 ppm      |

**Key:** OSHA=Occupational Safety and Health Administration;  
PEL=Permissible Exposure Limit; Ceiling=PEL Ceiling Limit; STEL=PEL Short-Term Exposure Limit; Skin=OSHA Skin Designation.

| Material/<br>CAS Number   | Percent | Ontario<br>TWA | Ontario<br>STEL | PPG IPEL           | PPG STEL           |
|---------------------------|---------|----------------|-----------------|--------------------|--------------------|
| XYLENES<br>1330-20-7      | 7 - 13  | 100 ppm        | 150 ppm         | Not<br>established | Not<br>established |
| NAPHTHALENE<br>91-20-3    | 1 - 5   | 10 ppm         | 15 ppm          | Not<br>established | Not<br>established |
| ETHYL BENZENE<br>100-41-4 | 1 - 5   | 100 ppm        | 125 ppm         | Not<br>established | Not<br>established |

**Key:** ACGIH=American Conference of Governmental Industrial Hygienists; OSHA=Occupational Safety and Health Administration; TLV=Threshold Limit Value; TWA=Time Weighted Average; PEL=Permissible Exposure Limit; IPEL=Internal Permissible Exposure Limit; Ceiling=TLV or PEL Ceiling Limit; STEL=TLV or PEL Short-Term Exposure Limit; Skin= Skin Absorption Designation. [C- Ceiling Limit; S- Potential Skin Absorption; R-Respirable Dust]

**Additional Information** Not applicable.

#### SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES (FORMULA VALUES, NOT SALES SPECIFICATIONS)

|                                    |                |
|------------------------------------|----------------|
| <b>SPECIFIC GRAVITY:</b>           | .919           |
| <b>PHYSICAL STATE:</b>             | Liquid         |
| <b>Percent Solids:</b>             | 40.19          |
| <b>Percent Volatile by Volume:</b> | 62.090         |
| <b>pH:</b>                         | Not available. |
| <b>ODOR THRESHOLD:</b>             | Not available. |

**Vapour Pressure:** 2.3 mmHg  
**ODOR/APPEARANCE:** Viscous liquid with an odor characteristic of the solvents listed in Section 2.  
**VAPOR DENSITY:** HEAVIER THAN AIR  
**Evaporation Rate:** 21  
**BOILING POINT OR RANGE:** 280 - 410 Degrees F  
**Freezing Point or Range:** Not Applicable.  
**Melting Point or Range(°C):** Not Applicable.  
**Partition coefficient (n-octanol/water):** Not Applicable.  
**WEIGHT PER GALLON:** 7.66 (U.S.) / 9.1 (IMPERIAL)

#### SECTION 10 - STABILITY AND REACTIVITY

**STABILITY:**

This product is normally stable and will not undergo hazardous reactions.

**CONDITIONS TO AVOID:**

None Known.

**INCOMPATIBLE MATERIALS:**

Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

**HAZARDOUS POLYMERIZATION:**

None Known.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

- Carbon monoxide - Carbon dioxide - Oxides of nitrogen

#### SECTION 11 - TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY**

| Material/<br>CAS Number                                   | Percent | ORAL<br>LD50 (g/kg) | DERMAL<br>LD50 (g/kg) | INHALATION<br>LC50 (mg/l) |
|---|---------|---------------------|-----------------------|---------------------------|
| AROMATIC<br>HYDROCARBON<br>64742-94-5                     | 15 - 40 | 3.20 g/kg           | 1.69 g/kg             | .59 mg/L. 4 h             |
| XYLENES<br>1330-20-7                                      | 7 - 13  | 4.30 g/kg           | 1.70 g/kg             | 21.88 mg/L. 4 h           |
| NAPHTHALENE<br>91-20-3                                    | 1 - 5   | .49 g/kg            | 20.00 g/kg            | Not Available             |
| ETHYL BENZENE<br>100-41-4                                 | 1 - 5   | 3.50 g/kg           | 17.80 g/kg            | Not Available             |
| 2,4,6 TRIS<br>(DIMETHYLAMINO<br>METHYL) PHENOL<br>90-72-2 | 1 - 5   | 1.20 g/kg           | 1.28 g/kg             | Not Available             |

**CHRONIC TOXICITY**

**Target Organs:**

- Blood oxygen capacity - Blood - Cataract - Eye - Retina - Carcinogen - Kidney - Liver - Embryotoxin - Brain - Central nervous system - Lung

**Mutagenicity Toxicity:**

This has not been tested for this product.

**Reproductive Toxicity:**

This has not been tested for this product.

**SUPPLEMENTAL HEALTH INFORMATION:**

| Material/<br>CAS<br>Number   | Percent | Ingredient Specific Animal Data:   |
|------------------------------|---------|--|
| ETHYL<br>BENZENE<br>100-41-4 | 1 - 5   | Ethylbenzene has been reported by NTP to cause cancer in laboratory animals following a chronic (2 year) inhalation exposure. Dose levels of 75, 250 and 750 ppm were used, with evidence of carcinogenicity found in the kidneys of rats and the lung and liver of mice at 750 ppm. The No Observed Effect Level (NOEL) was 75 ppm. The relevance of these findings to humans is uncertain, but appropriate safeguards should be employed to reduce or eliminate inhalation exposure to ethylbenzene. |

#### SECTION 12 - ECOLOGICAL INFORMATION

**POTENTIAL ENVIRONMENTAL EFFECTS**

**Ecotoxicity:** No Information Available.

**ENVIRONMENTAL FATE**

**Mobility:** No information available.

**Biodegradation:** No information available.

**Bioaccumulation:** No Information Available.

**PHYSICAL/CHEMICAL**

**Hydrolysis:** No information available.

**Photolysis:** No information available.

#### SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.

Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

#### SECTION 14 - TRANSPORTATION INFORMATION

**Proper Shipping Name:** Paint  
**NOS Technical Name:** None  
**Hazard Class:** 3  
**Subsidiary Class(es):** None  
**UN Number:** UN1263  
**Packing Group:** III

**USA - RQ Hazardous Substances:** Xylenes, Naphthalene, Ethyl Benzene

**USA-RQ Hazardous Substance Threshold Ship Weight:** Xylenes>786.7 Pounds, Naphthalene>2298.62 Pounds, Ethyl Benzene>31446.86 Pounds

**Marine Pollutant Name:** None

**USA Shipments Only - RQ Threshold Ship Weight:** This is the total weight of this product that must be shipped to exceed the RQ quantity.

#### SECTION 15 - REGULATORY INFORMATION

**INVENTORY STATUS**

**U.S. TSCA:** This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

**FEDERAL REGULATIONS**

**US Regulations**

Matthews Paint Company  
 Lake View Corporate Park  
 8201 - 100th St.  
 Pleasant Prairie, WI 53158

Product ID: 274909SP (0808)  
 PRODUCT NAME: EPOXY HARDENER

| Material/<br>CAS Number                                   | Percent | CERCLA HS -<br>RQ (LBS) | SARA EHS-<br>TPQ (LBS) | SARA 313   |
|---|---------|-------------------------|------------------------|------------|
| AROMATIC<br>HYDROCARBON<br>64742-94-5                     | 15 - 40 | Not Listed              | Not Listed             | Not Listed |
| XYLENES<br>1330-20-7                                      | 7 - 13  | 100 lbs                 | Not Listed             | Listed     |
| NAPHTHALENE<br>91-20-3                                    | 1 - 5   | 100 lbs                 | Not Listed             | Listed     |
| ETHYL BENZENE<br>100-41-4                                 | 1 - 5   | 1000 lbs                | Not Listed             | Listed     |
| 2,4,6 TRIS<br>(DIMETHYLAMINO<br>METHYL) PHENOL<br>90-72-2 | 1 - 5   | Not Listed              | Not Listed             | Not Listed |

Updated MSDS  
format.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations. Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.  
 274909SP 000001 (00361446.001)(09/22/05)  
 000503, 000, 0808

\*\*\* END OF MSDS \*\*\*

**SARA 311/312**

Health (acute): Yes  
 Health (chronic): Yes  
 Fire (flammable): Yes  
 Pressure: No  
 Reactivity: No

**WHMIS HAZARD CLASS:** - Class B, Division 2 - Class D, Division 2, Subdivision A - Class D, Division 2, Subdivision B - Class D, Division 1, Subdivision B

**STATE/PROVINCIAL REGULATIONS**

**CALIFORNIA PROP. 65:** WARNING: This product contains a chemical known to the State of California to cause cancer.

**Additional Information**

| Material/<br>CAS Number   | Percent | IARC<br>Group<br>1(Kno<br>wn<br>Human<br>Carc.) | IARC<br>Group<br>2A<br>(Proba<br>ble<br>Carc.) | IARC<br>2B (Suspec<br>ted<br>Carc.) | ACGIH<br>Carc. | NTP<br>Known<br>Carc. | OSHA<br>Carc. |
|---------------------------|---------|---|--|-------------------------------------|----------------|-----------------------|---------------|
| NAPHTHALENE<br>91-20-3    | 1 - 5   | N   | N  | Y                                   | N              | N                     | Y             |
| ETHYL BENZENE<br>100-41-4 | 1 - 5   | N   | N  | Y                                   | N              | N                     | Y             |

**Key:** IARC- International Agency on the Research of Cancer; ACGIH- American Conference of Governmental Industrial Hygienists; NTP- National Toxicology Program \*Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA- Occupational Safety and Health Administration.

**SECTION 16 - OTHER INFORMATION**

**Hazard Rating Systems**

**NFPA Rating:** 3 30

**HMIS Rating:** 3\*30

**Rating System:** 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, \*=Chronic Effects.

HMIS=Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

**PREPARED BY:** Product Safety Department

**REASON FOR REVISION:** Date. Edition.