

MATERIAL SAFETY DATA SHEET

F63R12
26 00

DATE OF PREPARATION
Nov 28, 2009

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

F63R12

PRODUCT NAME

POLANE® B Polyurethane Enamel (Part A), Thermal Red

MANUFACTURER'S NAME

THE SHERWIN-WILLIAMS COMPANY
101 Prospect Avenue N.W.
Cleveland, OH 44115

Telephone Numbers and Websites

| | |
|---------------------------|----------------|
| Regulatory Information | (216) 566-2902 |
| Medical Emergency | (216) 566-2917 |
| Transportation Emergency* | (800) 424-9300 |

*for Chemical Emergency ONLY (spill, leak, fire, exposure, or accident)

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

| % by Weight | CAS Number | Ingredient | Units | Vapor Pressure |
|-------------|---------------------|-------------------------------------|-----------------------------|----------------|
| 7 | 108-88-3 | Toluene | | |
| | | ACGIH TLV | 20 PPM | 22 mm |
| | | OSHA PEL | 100 PPM (Skin) | |
| OSHA PEL | 150 PPM (Skin) STEL | | | |
| 0.1 | 100-41-4 | Ethylbenzene | | |
| | | ACGIH TLV | 100 PPM | 7.1 mm |
| | | ACGIH TLV | 125 PPM STEL | |
| | | OSHA PEL | 100 PPM | |
| OSHA PEL | 125 PPM STEL | | | |
| 15 | 78-93-3 | Methyl Ethyl Ketone | | |
| | | ACGIH TLV | 200 PPM | 70 mm |
| | | ACGIH TLV | 300 PPM STEL | |
| | | OSHA PEL | 200 PPM | |
| OSHA PEL | 300 PPM STEL | | | |
| 24 | 108-94-1 | Cyclohexanone | | |
| | | ACGIH TLV | 25 PPM (Skin) | 2 mm |
| OSHA PEL | 25 PPM (Skin) | | | |
| 2 | 108-21-4 | Isopropyl Acetate | | |
| | | ACGIH TLV | 250 PPM | 47.5 mm |
| | | ACGIH TLV | 310 PPM STEL | |
| | | OSHA PEL | 250 PPM | |
| OSHA PEL | 310 PPM STEL | | | |
| 10 | 123-86-4 | n-Butyl Acetate | | |
| | | ACGIH TLV | 150 PPM | 10 mm |
| | | ACGIH TLV | 200 PPM STEL | |
| | | OSHA PEL | 150 PPM | |
| OSHA PEL | 200 PPM STEL | | | |
| 4 | 108-65-6 | 1-Methoxy-2-Propanol Acetate | | |
| | | ACGIH TLV | Not Available | 1.8 mm |
| OSHA PEL | Not Available | | | |
| 1 | 13463-67-7 | Titanium Dioxide | | |
| | | ACGIH TLV | 10 mg/m3 as Dust | |
| | | OSHA PEL | 15 mg/m3 Total Dust | |
| | | OSHA PEL | 5 mg/m3 Respirable Fraction | |

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

EFFECTS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver, urinary, blood forming, cardiovascular and reproductive systems.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

HMIS Codes

| | |
|--------------|----|
| Health | 2* |
| Flammability | 3 |
| Reactivity | 0 |

SECTION 4 — FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.

SKIN: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and laundry before re-use.

INHALATION: If any breathing problems occur during use, **LEAVE THE AREA** and get fresh air. If problems remain or occur later, **IMMEDIATELY** get medical attention.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

FLASH POINT

56 °F PMCC

LEL

1.0

UEL

13.1

FLAMMABILITY CLASSIFICATION

RED LABEL -- Flammable, Flash below 100 °F (38 °C)

EXTINGUISHING MEDIA

Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- Remove all sources of ignition. Ventilate the area.
- Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class IB

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are **FLAMMABLE**. Keep away from heat, sparks, and open flame.

During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally.

Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m³ (total dust), 3 mg/m³ (respirable fraction), OSHA PEL 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturers directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. **NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.**

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION

Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT

Use barrier cream on exposed skin.

OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|-------------------|--|
| PRODUCT WEIGHT | 8.25 lb/gal | 988 g/l |
| SPECIFIC GRAVITY | 0.99 | |
| BOILING POINT | 174 - 320 °F | 78 - 160 °C |
| MELTING POINT | Not Available | |
| VOLATILE VOLUME | 70% | |
| EVAPORATION RATE | Slower than ether | |
| VAPOR DENSITY | Heavier than air | |
| SOLUBILITY IN WATER | N.A. | |
| VOLATILE ORGANIC COMPOUNDS (VOC Theoretical - As Packaged) | | |
| 5.19lb/gal | 622g/l | Less Water and Federally Exempt Solvents |
| 5.19lb/gal | 622g/l | Emitted VOC |

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID

None known.

INCOMPATIBILITY

None known.

HAZARDOUS DECOMPOSITION PRODUCTS

By fire: Carbon Dioxide, Carbon Monoxide

HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Methyl Ethyl Ketone may increase the nervous system effects of other solvents.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Ethylbenzene is classified by IARC as possibly carcinogenic to humans (2B) based on inadequate evidence in humans and sufficient evidence in laboratory animals. Lifetime inhalation exposure of rats and mice to high ethylbenzene concentrations resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations. There is no evidence that ethylbenzene causes cancer in humans.

IARC's Monograph No. 93 reports there is sufficient evidence of carcinogenicity in experimental rats exposed to titanium dioxide but inadequate evidence for carcinogenicity in humans and has assigned a Group 2B rating. In addition, the IARC summary concludes, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials, such as paint."

TOXICOLOGY DATA

| CAS No. | Ingredient Name | | | |
|------------|------------------------------|----------------------|-----|--------------------------------|
| 108-88-3 | Toluene | LC50 RAT LD50 RAT | 4HR | 4000 ppm 5000 mg/kg |
| 100-41-4 | Ethylbenzene | LC50 RAT LD50 RAT | 4HR | Not Available 3500 mg/kg |
| 78-93-3 | Methyl Ethyl Ketone | LC50 RAT LD50 RAT | 4HR | Not Available 2740 mg/kg |
| 108-94-1 | Cyclohexanone | LC50 RAT LD50 RAT | 4HR | 8000 ppm 1535 mg/kg |
| 108-21-4 | Isopropyl Acetate | LC50 RAT LD50 RAT | 4HR | Not Available 3000 mg/kg |
| 123-86-4 | n-Butyl Acetate | LC50 RAT LD50 RAT | 4HR | 2000 ppm 13100 mg/kg |
| 108-65-6 | 1-Methoxy-2-Propanol Acetate | LC50 RAT LD50 RAT | 4HR | Not Available 8500 mg/kg |
| 13463-67-7 | Titanium Dioxide | LC50 RAT LD50 RAT | 4HR | Not Available Not Available |

SECTION 12 — ECOLOGICAL INFORMATION**ECOTOXICOLOGICAL INFORMATION**

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS**WASTE DISPOSAL METHOD**

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION**US Ground (DOT)**

1 Gallon and Less may be Classed as CONSUMER COMMODITY, ORM-D
Larger Containers are Regulated as:
UN1263, PAINT, 3, PG II, (ERG#128)

DOT (Dept of Transportation) Hazardous Substances & Reportable Quantities

Cyclohexanone 5000 lb RQ
Toluene 1000 lb RQ
Xylenes (isomers and mixture) 100 lb RQ

Bulk Containers may be Shipped as (check reportable quantities):

UN1263, PAINT, 3, PG II, (ERG#128)

Canada (TDG)

UN1263, PAINT, CLASS 3, PG II, (ERG#128)

IMO

UN1263, PAINT, CLASS 3, PG II, (13 C c.c.), EmS F-E, S-E

SECTION 15 — REGULATORY INFORMATION**SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION**

| CAS No. | CHEMICAL/COMPOUND | % by WT | % Element |
|----------|-------------------|---------|-----------|
| 108-88-3 | Toluene | 7 | |
| 100-41-4 | Ethylbenzene | 0.1 | |

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.