

MATERIAL SAFETY DATA SHEET  
COATINGS AND RESINS GROUP

PPG Industries, Inc.

SECTION 1 - CHEMICAL, PRODUCT, AND COMPANY INFORMATION

PRODUCT CODE/IDENTITY: DMD617

PRODUCT TRADE NAME: MOLY ORANGE

REVISION DATE: 01/25/02 (000) 0808

CUSTOMER PART #/NAME: Not applicable

CHEMICAL FAMILY: Acrylic

EMERGENCY MEDICAL/SPILL INFO: (304) 843-1300 (U.S.) 01-800-00-21-400 (MEXICO)

TECHNICAL INFORMATION: (440) 572-2800

PRODUCT SAFETY/MSDS INFORMATION: 4325 ROSANNA DRIVE, P.O. BOX 9 ALLISON PARK, PA 15101 (412) 492-5555

DATE OF MSDS PREPARATION: 02/21/02

PRIMARY HAZARD WARNING

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. Harmful if swallowed. Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed. May cause moderate skin irritation. Causes severe eye irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction. Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat. Sanding and grinding dusts may be harmful if inhaled.

THIS MATERIAL SAFETY DATA SHEET HAS BEEN PREPARED IN ACCORDANCE WITH 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.

TRANSPORTATION OF DANGEROUS GOODS

PROPER SHIPPING NAME: Paint

NOS TECHNICAL NAME: None

HAZARD CLASS: 3

SUBSIDIARY CLASS: None

UN NUMBER: UN1263

PACKING GROUP: II

MARINE POLLUTANT: None

USA-RQ, HAZARDOUS SUBSTANCE: Xylenes, N-Butyl Acetate, Toluene

USA-RQ, HAZARDOUS SUBSTANCE THRESHOLD SHIP WEIGHT: Xylenes>3703.33 Pounds,  
N-Butyl Acetate>20008.03 Pounds, Toluene>42918.88 Pounds

CANADA SCHEDULE XIII, 9.2:

CANADA SCHEDULE XIII, 9.2 THRESHOLD SHIP WEIGHT:

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

Canada Shipments Only - Canada Schedule XIII Threshold Ship Weight: This is the total weight of this product that must be shipped to exceed the Canadian Schedule XIII Regulated Limit quantity.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS				
REF	HAZARDOUS INGREDIENTS	PERCENT	CAS NUMBER	CARCINOGEN*
01	ETHYL BENZENE	0.1- <1	100-41-4	I
02	TOLUENE	1 - <5	108-88-3	
03	N-BUTYL ACETATE	20- <30	123-86-4	
04	LEAD CHROMATE MOLYBDATE SULFATE	30- <40	12656-85-8	
05	XYLENES	1 - <5	1330-20-7	
06	V.M. AND P. NAPHTHA	1 - <5	8032-32-4	

\* Carcinogens: O=OSHA; A=ACGIH; N=NTP; I=IARC

SARA TITLE III & CERCLA CLASSIFICATIONS									
REF	SARA 102 RQ (LBS)	SARA 302 TPQ (LBS)	SARA 313	SARA 311/312					
				AC	CH	FL	PR	RE	
01	1000 lbs	NOT ESTAB	Y	Y	Y	Y	N	N	
02	1000 lbs	NOT ESTAB	Y	Y	N	Y	N	N	
03	5000 lbs	NOT ESTAB	N	Y	N	Y	N	N	
04	NOT ESTAB	NOT ESTAB	N	Y	Y	N	N	N	
04	NOT ESTAB	NOT ESTAB	Y						(CR6 CMPD)
04	NOT ESTAB	NOT ESTAB	N						(INORG PB)
04	NOT ESTAB	NOT ESTAB	N						(MO CMPD)
04	1 lb	NOT ESTAB	Y						(PB CMPD)
04	1 lb	NOT ESTAB	Y						(CHROMIUM)
04	NOT ESTAB	NOT ESTAB	N						(CHROMATES)
04	NOT ESTAB	NOT ESTAB	N						(MOLYBDATES)
04	NOT ESTAB	NOT ESTAB	N						(INORG CR)
04	NOT ESTAB	NOT ESTAB	Y						(AS CR)
04	NOT ESTAB	NOT ESTAB	Y						(AS PB)
04	NOT ESTAB	NOT ESTAB	N						(AS CR6)
05	100 lbs	NOT ESTAB	Y	Y	N	Y	N	N	
06	NOT ESTAB	NOT ESTAB	N	Y	N	Y	N	N	
06	NOT ESTAB	NOT ESTAB	N						(NAPHTHA)

SARA 311/312 CATEGORIES FOR THIS PRODUCT: ACUTE= Y, CHRONIC= Y, FLAMMABILITY= Y, PRESSURE= N, REACTIVITY= N

OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THE FOLLOWING MATERIALS:

REF	ACGIH		U.S. OSHA	
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-STEL
01	100 ppm	125 ppm	100 ppm	125 ppm
02	S- 50 ppm	NOT ESTAB	100 ppm	150 ppm
03	150 PPM	200 ppm	150 ppm	200 ppm
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB
04	0.05 mg/m3	NOT ESTAB	NOT ESTAB	NOT ESTAB
04	0.05 mg/m3	NOT ESTAB	NOT ESTAB	NOT ESTAB
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB

04	NOT ESTAB	NOT ESTAB	C- 0.1 mg/m3	NOT ESTAB	(CHROMATES)
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB	(MOLYBDATES)
04	0.5 mg/m3	NOT ESTAB	NOT ESTAB	NOT ESTAB	(INORG CR)
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB	(AS CR)
04	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB	(AS PB)
0	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB	(AS CR6)
05	100 ppm	150 ppm	100 ppm	150 ppm	
06	300 ppm	NOT ESTAB	300 ppm	400 ppm	
06	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB	(NAPHTHA)

[C- Ceiling Limit; S- Potential Skin Absorption; R- Respirable Dust]

REF ACGIH TLV - BASIS - CRITICAL EFFECT(S)

```

-----
01  irritation; CNS
02  CNS
03  irritation
04  NOT ESTAB.
04  (CR6 CMPD) ...cancer; irritation
04  (INORG PB) ...CNS; GI; blood; kidney; reproductive
04  (MO CMPD) ...NOT ESTAB.
04  (PB CMPD) ...NOT ESTAB.
04  (CHROMIUM) ...NOT ESTAB.
04  (CHROMATES) ...NOT ESTAB.
04  (MOLYBDATES) ...NOT ESTAB.
04  (INORG CR) ...irritation; dermatitis
04  (AS CR) ...NOT ESTAB.
04  (AS PB) ...NOT ESTAB.
04  (AS CR6) ...NOT ESTAB.
05  irritation
0/  irritation; CNS
0   (NAPHTHA) ...NOT ESTAB.

```

[ACGIH TLV BASIS - CRITICAL EFFECT(S): CNS-CENTRAL NERVOUS SYSTEM;  
CVS-CARDIOVASCULAR SYSTEM; CWP-COAL WORKER'S PNEUMOCONIOSIS;  
GI-GASTROINTESTINAL] [NOT ESTAB.= NOT ESTABLISHED = NOT APPLICABLE] [NOT ESTAB.  
= NOT ESTABLISHED = NOT APPLICABLE]

PRODUCT STATUS RELATIVE TO THE U.S. EPA TOXIC SUBSTANCES CONTROL ACT

All chemical substances in this product are listed on the U.S. TSCA Inventory or are otherwise exempt from TSCA Inventory reporting requirements.

### SECTION 3 - HAZARDS IDENTIFICATION

#### EFFECTS OF OVEREXPOSURE FROM:

**INGESTION:** Harmful if swallowed. Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed.

**EYE CONTACT:** Causes severe eye irritation.

**SKIN CONTACT:** May cause moderate skin irritation. May be harmful if absorbed through the skin. Prolonged or repeated contact may cause an allergic skin reaction.

**INHALATION:** Vapor and/or spray mist may be harmful if inhaled. Vapor irritates eyes, nose, and throat. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage.

**CHRONIC OVEREXPOSURE:** Avoid long-term and repeated contact. Overexposure to lead

adversely affects blood and blood forming tissues, kidneys, liver and the central nervous system, reproductive organs and causes adverse developmental effects. NTP and IARC have classified chromium (+6) compounds as carcinogenic. No human data were available on the risk associated with use of strontium chromate or other chromate pigments. This product contains an insoluble form of a chromium (6+) compound. NTP and IARC associate these materials with an increased risk of cancer. This product contains toluene. Toluene inhalation in animals (greater than 1500 ppm) and intentional inhalation of toluene-containing products by humans (e.g. glue) has caused adverse fetal development effects. Ethylbenzene has been reported by NTP to cause cancer in laboratory animals following a chronic (2 year) inhalation exposure. Carcinogenicity was found in the kidneys of rats and the lung and liver of mice at the 750 ppm dose level. The No Observed Effect Level (NOEL) was 75 ppm. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. 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 significance of these findings to humans has not been determined.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Contains lead. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Dried film of this product may be harmful if chewed or swallowed. 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. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

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

**WARNING:** This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

#### SECTION 4 - FIRST AID MEASURES

**IMPORTANT FIRST AID INFORMATION:** If ingestion, any type of overexposure or symptoms of overexposure occur during or following the use of this product, contact a poison control center, emergency room or physician immediately; have Material Safety Data Sheet information available.

**INGESTION:** Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

**EYE CONTACT:** Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may 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.

#### SECTION 5 - FIRE FIGHTING MEASURES

FLASHPOINT: 72 Degrees F ( 22 Degrees C) (PENSKY-MARTENS CLOSED CUP)  
FLAMMABLE LIMITS: Lower explosion limit (LEL): 1.4

Upper explosion limit (UEL): 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 IB flammable liquid fires.

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.

SPECIAL FIRE FIGHTING PROCEDURES: 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. If water is used, fog nozzles are preferable. Fire-fighters should wear self-contained breathing apparatus and full protective clothing.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE 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.

WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state, provincial, and local environmental control regulations. Empty containers should be recycled or disposed of through an approved waste management facility.

#### SECTION 7 - HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Do not store above 120 degrees F.(48 degrees C.). Store large quantities in buildings designed and protected for storage of NFPA Class IB flammable liquids.

OTHER PRECAUTIONS: 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. Do not apply on toys or other children's articles, furniture, or interior surfaces of any dwelling or facility. Do not apply on those exterior surfaces of any dwelling units, such as windowsills, porches, stairs, or railings to which children may be commonly exposed. Wash thoroughly before eating or smoking.

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

PERSONAL PROTECTIVE EQUIPMENT FOR:

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

SKIN PROTECTION: Wear protective clothing to prevent skin contact. Apron and gloves should be constructed of: neoprene rubber or 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.

RESPIRATORY PROTECTION: 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.

OTHER EQUIPMENT: Clean contaminated clothing and shoes.

VENTILATION REQUIREMENTS: 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.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

[FORMULA VALUES, NOT SALES SPECIFICATIONS]

BOILING RANGE: 214- 417Degrees F

SOLUBILITY IN WATER: .2 %

VAPOR PRESSURE: 9.4 mmHg

WEIGHT/GALLON (LBS): 10.88 (U.S.)

VAPOR DENSITY: Heavier than air

pH: Not determined

% VOLATILE/VOLUME: 51.560

% SOLIDS BY WEIGHT: 65.88

SPECIFIC GRAVITY: 1.306

EVAPORATION RATE(BuOAc=100): 110

ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the solvents listed in Section 2.

## SECTION 10 - STABILITY AND REACTIVITY

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

INCOMPATIBILITY (MATERIALS AND CONDITIONS TO AVOID): Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: May produce the following hazardous decomposition products when exposed to extreme heat: carbon monoxide ; carbon dioxide ; oxides of chromium ; oxides of molybdenum ; oxides of lead ; oxides of sulfur ; lower molecular weight polymer fractions; Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

Hazardous Materials Identification System (HMIS) and National Fire Protection Association (NFPA) Ratings:

HMIS Rating		NFPA Rating	
HEALTH	2*	HEALTH	2

FLAMMABILITY 3  
REACTIVITY 0

FLAMMABILITY 3  
INSTABILITY 0

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

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

THIS IS THE END OF THE MSDS FOR: DMD617 (00224424.001DMD617 )

Manufactured and Supplied by:

REFINISH PRODUCTS

19699 PROGRESS DRIVE

STRONGSVILLE, OH 44149

Z\

