

**MATERIAL SAFETY DATA SHEET**

Product: DTM 1400 series Non-Sanding Primer  
 Manufacturer's Name: Precision Coatings Inc.  
 Address: 1940 E. Trafficway, Springfield, Missouri, 65802

MSDS No. 1400  
 Date Prepared: October 1, 1999  
 Emergency Telephone  
 Number: 800-424-9300 Chemtrec  
 Other Information  
 Calls: (417) 862-5738

**SECTION-1 IDENTITY**

Common Name (Used on Label): DTM 1400 series Non-Sanding Primer  
 Chemical Name: Paint  
 Chemical Family: acetoacetate modified acrylic

CAS No: None  
 Formula: 1400

**SECTION-2 HAZARDOUS INGREDIENTS/IDENTITY**

Hazardous Components	CAS No.	Vapor Pressure	ACGIH TLV		OSHA		
			TWA	STEL	PEL	CEILING	PEAK
Methyl n-amyl ketone	110-43-0	2.1mmHg	50ppm	NE	50ppm	NE	NE
Styrene	100-42-5	4.50mmHg	50ppm	100	100ppm	200ppm	NE
Xylene	1330-20-7	5.1mmHg	100ppm	150	100ppm	NE	NE
Ethyl benzene	100-41-4	7.1mmHg	100ppm	125	100ppm	NE	NE
Toluene	108-88-3	23.8mmHg	50ppm	150	100ppm	NE	NE
Benzene, 1-chloro-4 (Trifluoromethyl)-PCBTF	98-56-6	5.3mmHg	NE		NE	20ppm	NE
Talc, hydrous magnesium silicate	14807-96-6	none	10mg/m3	NE	15mg/m3	NE	NE
Titanium dioxide	13463-67-7	none	10mg/m3	NE	10mg/m3	NE	NE
Calcium carbonate	471-34-1	none	10mg/m3	NE	NE	NE	NE
Zinc phosphate	7779-90-0	none	NE		NE	NE	NE
Zinc oxide	1314-13-2	none	NE		NE	NE	NE
Bisphenol A/Epichlorohydrin based epoxy resin	25068-38-6	none	NE		NE	NE	NE

**SECTION-3 PHYSICAL & CHEMICAL CHARACTERISTICS**

Boiling Point: 231 F - 300 F      Specific Gravity: 1.7202      Vapor Pressure (mm Hg): NE  
 Percent Volatile by Volume: 60      Vapor Density (Air =1): Heavier      Evaporation Rate (Ether=1): Slower  
 Solubility in Water: Slight      Reactivity in Water: None      Appearance: Pigmented liquid  
 Odor: Naphthalenic odor

VOC Reportable as packaged: 0.57 lbs/gal (68 g/l)  
 VOC Reportable as applied (4:1 w/1461): 0.93 lbs/gal (112 g/l)  
 VOC Regulatory as packaged: 1.24 lbs/gal (149 g/l) (less water & exempt compounds)  
 VOC Regulatory as applied (4:1 w/1461): 1.82 lbs/gal (218 g/l) (less water & exempt compounds)

**SECTION-4 FIRE & EXPLOSION DATA**

Flash Point: 45F 7C      Method Used: Pensky Martins Closed Cup      Auto-Ignition Temperature: NE  
 Flammability Classification: OSHA: Flammable Liquid Class 1-B      DOT: Flammable Liquid  
 Extinguisher Media: NFPA Class B (CO2, Dry Chemical, Foam)  
 Flammable Limits in Air % by volume: LEL Lower: NE      UEL Upper: NE  
 Special Fire Fighting Procedures: Water spray may be ineffective on fire but can protect fire fighters and cool containers to prevent pressure buildup. Use fog nozzles if water is used. Full protective equipment, including self-contained breathing apparatus, is recommended.  
 Unusual Fire and Explosion Hazards: When heated above the flash point, emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at

temperatures below the flash point. Closed containers may explode if exposed to extreme heat.

#### **SECTION-5 PHYSICAL HAZARDS (REACTIVITY DATA)**

Stability: Stable

Conditions to Avoid: Keep away from heat, sparks, electrical equipment and open flame.

Incompatibility (materials to avoid): Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose the resin system, generating unidentified fumes and vapors which may be toxic.

Hazardous Decomposition Products: Carbon monoxide, aldehydes, acids, and other organic substances may be formed during combustion or elevated (greater than 500 degrees F) temperature degradation.

Hazardous Polymerization: Will not occur.

#### **SECTION-6 HEALTH HAZARDS**

##### **Acute Overexposure:**

**Skin:** May cause irritation. Other effects of skin contact include defatting leading to dermatitis and dehydration.

**Eye:** May cause eye irritation with moderate to severe redness, swelling and some corneal injury lasting several days to a week.

**Inhalation:** May cause nose and throat irritation. Other effects of inhalation may include drowsiness. May cause injury to the liver, kidneys and nervous system.

**Ingestion:** Harmful if swallowed.

Contact with product at elevated temperatures can result in thermal burns.

Preexisting skin, eye and respiratory disorders may be aggravated by exposure to this product.

**Notice:** Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

##### **Chronic Overexposure:**

Repeated overexposure to this product may cause central nervous system damage, lung damage, liver and kidney damage.

May cause skin sensitization (allergy). May be evidenced by rashes, especially hives.

Toxicology studies with laboratory animals and occupational evaluations with humans have found limited evidence of birth defects, low birth weights and delayed growth in offspring resulting from repeated exposures to toluene during pregnancy.

##### **Carcinogenicity:**

Contains styrene which has been shown to cause cancer in laboratory animals by ingestion and is listed as a suspect by IRAC (Group-2B).

Recent 2-year bioassays in mice exposed by the dermal route to the diglycidyl ether of Bisphenol A (DGEBA) and to other commercial Bisphenol A / Epichlorohydrin liquid epoxy resins which are composed predominantly of DGEBA have yielded very limited evidence of weak carcinogenicity. DGEBA is a component of the Bisphenol A / Epichlorohydrin based epoxy resin used in this product. The authors of this work concluded that the renal tumor evidence "was of no biological significance" and that the resin "is not a systemic carcinogen when applied to the dorsal skin of CF1 mice." Based upon this and all other available information, the International Agency for Research on Cancer (IRAC) concluded (1988) that DGEBA was not classifiable as a carcinogen

(IRAC Group-2B).

Calcium Carbonate is not on the NTP, IRAC, or OSHA lists of carcinogens. Crystalline silica, a trace component of Calcium Carbonate, has been listed by IRAC as carcinogenic to experimental animals and has developed limited evidence for carcinogenicity to humans, however, IRAC has determined that the caarcinogenicity to humans is neither certain of proven.

Prolonged, repeated inhalation of crystalline silica can cause silicosis, a noncancerous lung disease.

Mutagenicity: Both liquid BPA/ECH epoxy resin and DGEBA, a component of this product, have proved to be inactive when tested by In Vivo mutagenicity assays. They have both shown activity by In Vitro microbial mutagenicity screening and have both produced chromosomal aberrations in cultured rat liver cells. The significance of this information to man is unknown.

#### SECTION-7 FIRST AID

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Consult a physician.

**Eye Contact:** Flush with water for at least 15 minutes. Consult a physician.

**Skin Contact:** Wash with soap and water. If irritation persists, consult a physician.

**Ingestion:** DO NOT induce vomiting. Call a physician immediately. Have the names of ingredients available.

#### SECTION-8 SPECIAL PRECAUTIONS

Observe label precautions. Keep away from heat, sparks and flame. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120 degrees F. Do not flame cut, saw, braze or weld containers. Empty containers may contain hazardous product residues. Launder contaminated clothing before reuse.

Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

#### SECTION-9 SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Remove all sources of ignition. Isolate from oxidizers. Ventilate area. Remove with inert materials and non-sparking tools.

**Waste disposal methods:** Dispose in accordance with all Federal, State and Local regulations. When discarded, this material is a hazardous waste.

#### SECTION-10 SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Do not breathe vapors or mists. Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during application and handling unless air monitoring demonstrates vapor/mist levels below applicable limits. Follow respirator manufacturer's recommendations for selection and use.

**Ventilation:** Provide sufficient ventilation to keep vapor concentration below the given TLV and/or PEL.

**Protective clothing:** Solvent resistant gloves are required for prolonged or repeated contact. Refer to safety equipment supplier for effective glove recommendations.

Use safety goggles or safety glasses with splash guards or side shields to protect against splash of liquids.

Other protective equipment such as eye bath and shower should be available. Use chemical resistant apron, boots or other clothing if needed to avoid repeated or frequent contact. Liquid may penetrate shoes and leather causing delayed irritation.

#### SECTION-11 REGULATORY INFORMATION

**OSHA:** This product is considered hazardous under the Federal OSHA Hazard Communication

Standard.

**SARA Title III Section 302 Extremely Hazardous Substances:** None

**SARA Title III Section 311/312 Hazard Categories:** Immediate health, delayed health, fire hazard.

**Section 313 Supplier Notification:** The chemicals listed below with percentages are subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986 and of 40 CFR 372:

<u>CAS Number</u>	<u>Chemical Name</u>	<u>% by Weight</u>
100-41-4	Ethylbenzene	0.6
1330-20-7	Xylene	2.5
108-88-3	Toluene	less than 0.1%
100-42-5	Styrene	less than 0.1%
none	Zinc Compound	8.40%

**Hazardous Air Pollutants:** Xylene, ethylbenzene, toluene, styrene

**Hazardous Waste:** When discarded in its supplied form, this product meets the hazard criteria of "ignitability" and must be considered as hazardous waste D001.

**TSCA status:** All ingredients are TSCA registered.

**CEPA status:** All ingredients are listed on the DSL or NDSL.

**Proposition 65 Warning:** This product contains chemicals known to the State of California to cause cancer: Styrene, silica (quartz), arsenic (less than 1ppm).

**Warning:** This product contains chemicals known to the State of California to cause birth defects or other reproductive harm: Toluene, lead (less than 1ppm).

**SECTION-12 OTHER INFORMATION**

While Precision Coatings, Inc. believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Precision Coatings, Inc. assumes legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.