

**MATERIAL SAFETY DATA SHEET**

Product: PC4v28 Acrylic Polyurethane Topcoat  
 Manufacturer's Name: Precision Coatings, Inc.  
 Address: 1940 E. Trafficway, Springfield, Missouri, 65802

MSDS No. PC4v28  
 Date Prepared: April 7, 2005  
 Emergency Telephone  
 Number: 800-424-9300 Chemtrec  
 Other Information  
 Calls: (417) 862-5738

**SECTION-1 IDENTITY**

Common Name (Used on Label): PC4 Acrylic Polyurethane Topcoat v28

Chemical Name: Paint

CAS No: None

Chemical Family: Acrylic

Formula: PC4v28

**SECTION-2 HAZARDOUS INGREDIENTS/IDENTITY**

Hazardous Components	CAS No.	Vapor Pressure	ACGIH TLV TWA STEL	OSHA		
				PEL	CEILING	PEAK
Methyl n-amyl ketone	110-43-0	2.1mmHg	50ppm NE	100ppm	NE	NE
VM&P naphtha	8032-32-4	5.2mmHg	300ppm NE	300ppm	NE	NE
Xylene (less than 1%)	1330-20-7	5.1mmHg	100ppm 150	100ppm	NE	NE
Ethyl benzene (less than 0.3%)	100-41-4	7.1mmHg	100ppm 125	100ppm	NE	NE
Benzene, 1-chloro-4 (Trifluoromethyl)-PCBTF (30%v/v)	98-56-6	5.3mmHg	NE	NE	20ppm	NE
Specific colors contain one or more of the following. See Section-12 Other Information.						
Carbon black	1333-86-4	none	3.5mg/m3 NE	3.5mg/m3	NE	NE
Titanium dioxide	13463-67-7	none	10mg/m3 NE	10mg/m3	NE	NE
Aluminum Hydroxide	21645-51-2	none	NE	NE	NE	NE
Amorphous Silica	7631-86-9	none	10mg/m3 NE	6mg/m3	NE	NE
Aluminum Flake	7429-90-5	none	10mg/m3 NE	15mg/m3	NE	NE
Stoddard Solvent (less than 5%)	8052-41-3	4.8mmHg	100ppm NE	100ppm	NE	NE
Aromatic Solvent (less than 5%)	64742-95-6	4.1mmHg	50ppm NE	NE	NE	NE
Titanium dioxide (rutile)	1317-80-2	none	10mg/m3 NE	10mg/m3	NE	NE
Mica	12001-26-2	none	3mg/m3 NE	3mg/m3	NE	NE
Nickel, (Carbonato(2-))Tetrahydroxytri-	12607-70-4	none	0.05 mg/m3	1mg/m3	NE	NE
Quinacridone	1503-48-6	none	NE	NE	NE	NE
Hydrous aluminum silicate	1332-58-7	none	10mg/Kg NE	10mg/m3	NE	NE
Iron oxide yellow	51274-00-1	none	5mg/m3 NE	10 ppm	NE	NE
Iron oxide red	1332-37-2	none	5mg/m3 NE	10 ppm	NE	NE
Iron oxide red	1309-37-1	none	5mg/m3 NE	10ppm	NE	NE
Iron oxide black	1317-61-9	none	5mg/m3 NE	10 ppm	NE	NE
Ferric Hexacyanoferrate	14038-43-8	none	10mg/m3 NE	5mg/m3	NE	NE

**SECTION-3 PHYSICAL & CHEMICAL CHARACTERISTICS**

Boiling Point: 250° F - 302° F

Specific Gravity: 1.0621-1.2638

Vapor Pressure (mm Hg): NE

Percent Volatile by Volume: 69

Vapor Density (Air =1): Heavier

Evaporation Rate (Ether=1): Slower

Solubility in Water: Slight

Reactivity in Water: None

Appearance: Pigmented liquid

Odor: Naphthalenic odor

Flammability Classification: OSHA: Flammable Liquid Class 1-B DOT: Flammable Liquid

**VOC as applied (less water & exempt compounds): 327 grams/liter max. (2.73 lbs/gal)**

**VOC as packaged (less water & exempt compounds): 408 grams/liter max. (3.40 lbs/gal)**

**VOC of material as packaged: 247 grams/liter max. (2.06 lbs/gal)**

**SECTION-4 FIRE & EXPLOSION DATA**

Flash Point: 65°F 18°C

Method Used: TCC

Auto-Ignition Temperature: NE

Extinguisher Media: NFPA Class B (CO<sub>2</sub>, 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): Strong oxidizers

Hazardous Decomposition Products: Oxides of Carbon

Hazardous Polymerization: Will not occur.

#### SECTION-6 HEALTH HAZARDS

##### Acute Overexposure:

Excessive vapor concentration in air, especially in confined spaces, may cause asphyxiation.

Excessive inhalation of vapors can cause nasal, throat, and respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Eye contact with liquid or vapor causes severe irritation, redness, tearing, blurred vision, and a sensation of seeing halos around lights.

Prolonged skin contact may lead to extraction of natural oils with resultant dry skin, cracking, irritation and dermatitis.

Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal.

**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:

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids and vapors should be minimized.

Prolonged or continuous inhalation of vapors may result in delayed lung damage.

Repeated or prolonged inhalation of vapor or spray mist may cause liver and kidney damage.

Repeated inhalation of vapor or spray mist may cause cardiac disorders.

Repeated inhalation of vapor or spray mist may cause red blood cell and leucocyte disorders which may result in an anemic condition.

**Carcinogenicity:** Based on an IRAC conclusion that there is "*sufficient evidence* in experimental animals for the carcinogenicity of carbon black" and "*inadequate evidence* of carcinogenicity in humans, IRAC's overall evaluation is that "carbon black is *possibly carcinogenic to humans*" (Group 2B).

Carbon black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety & Health (NIOSH) criteria document on carbon black recommends that only carbon blacks with PAH (polynuclear aromatic hydrocarbons) levels greater than 0.1% be considered suspect carcinogens. The carbon black pigment used in this product contains less than 0.1% PAH.

Nickel, (Carbonato(2-)) Tetrahydroxytri-: is not considered to be carcinogenic by NTP, IARC, or OSHA. ACGIH

classifies all nickel compounds as A-1 carcinogens.

#### 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.

#### 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 a positive pressure supplied air respirator (NIOSH/MSHA TC-19C) while mixing activator with paint or clear, during application and until all vapors and spray mists are exhausted. Individuals with a history of lung or breathing problems or prior reaction to isocyanates should not use or be exposed to this product. Do not permit anyone without protection in the painting area. Follow respirator manufacturer's directions for respirator 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	0.22
1330-20-7	Xylene	0.8
108-88-3	Toluene	less than 0.1
71-43-2	Benzene	less than 0.01

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

**Hazardous Waste:** When discarded in its supplied form, this product must be considered a hazardous waste.

**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, birth defects or other reproductive harm: Benzene, Toluene

**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.