

Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **500-299 PERMATONE ORANGE BROWN**

Supplier - Manufacturer **Chemcraft International Inc.,**

155 Rose Glen Road North
P.O. Box 458
Port Hope, ON.
Canada L1A 3Z3

Telephone (905) 885-6388 Fax (905) 885-5097

In case of Emergency (905) 885-6388, (800) 263-7951

For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code 500-299

Synonym PERMATONE ORANGE BROWN

Chemical Name Not applicable.

Chemical Family Synthetic polymer in organic solvent. (Polymer.)

Chemical Formula Not applicable.

Material Uses Coatings: Surface coatings and finishes.

Product Identification Number (PIN) 1263 PAINT

Section 2. Hazardous Ingredients

Name	CAS #	% by Weight	Exposure Limits	
			LC ₅₀ /LD ₅₀	TLV/PEL
Methyl alcohol	67-56-1	78.1	ORAL (LD50): Acute: 6200 mg/kg [Rat.]. 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit.].	TWA: 200 STEL: 250 (ppb) from ACGIH (TLV) [United States] [1997] TWA: 262 STEL: 328 (ppm) from ACGIH (TLV) [United States] [1997]
Propylene glycol monomethyl ether	107-98-2	19.6	ORAL (LD50): Acute: 5660 mg/kg [Rat.]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit.].	TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States]

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

Section 3. Physical Data

Physical State and Appearance Liquid.

Color Not available. Odor Not available. Taste Not available.

Molecular Weight Not applicable.

pH (1% soln/water) Neutral.

Boiling Point The lowest known value is 64.5°C (148.1°F) (Methanol). Weighted average: 75.61°C (168.1°F)

Melting Point May start to solidify at -95°C (-139°F) based on data for: 2-Propanol, 1-methoxy-. Weighted average: -97.24°C (-143°F)

Critical Temperature Not available.

Specific Gravity Weighted average: 0.81 (Water = 1)

Vapor Pressure The highest known value is 12.2 kPa (@ 20°C) (Methanol). Weighted average: 10.1 kPa (@ 20°C)

Continued on Next Page

Vapor Density	The highest known value is 3.12 (Air = 1) (2-Propanol, 1-methoxy-). Weighted average: 1.51 (Air = 1)
Volatility	Not available.
Odor Threshold	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Insoluble in n-octanol.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks. Non-flammable in presence of shocks, of heat, of oxidizing materials, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
Fire Fighting Media and Instructions	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes. (Methanol)
Flash Points	The lowest known value is CLOSED CUP: 12°C (53.6°F). (Tagliabue.). OPEN CUP: 15.6°C (60.1°F). (Tagliabue). (Methanol)
Flammable Limits	The greatest known range is LOWER: 6% UPPER: 36.5% (Methanol)
Auto-Ignition Temperature	The lowest known value is 287°C (548.6°F) (2-Propanol, 1-methoxy-).
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Explosion Hazards in Presence of Various Substances	Highly explosive in presence of open flames and sparks. Non-explosive in presence of shocks, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
Special Remarks on Explosion Hazards	Not available.

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Highly reactive with oxidizing agents. Non-reactive with reducing agents, combustible materials, organic materials, metals, acids, alkalis, moisture.
Corrosivity	Non-corrosive in presence of glass, of aluminum, of zinc, of copper, of stainless steel(304), of stainless steel(316).
Special Remarks on Reactivity	Air sensitive. (2-Propanol, 1-methoxy-)
Special Remarks on Corrosivity	Not available.

Section 6. Toxicological Properties

Routes of Entry	Dermal contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 5600 mg/kg [Rat]. (Methanol). Acute dermal toxicity (LD50): 13000 mg/kg [Rabbit]. (2-Propanol, 1-methoxy-).
Effects of Acute Exposure	Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (permeator). Hazardous in case of skin contact (irritant), of inhalation. Non-corrosive for skin.

Chronic Effects on Humans	<p>CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [Methanol]. Classified 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [2-Propanol, 1-methoxy-].</p> <p>MUTAGENIC EFFECTS: Not available.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Not available.</p> <p>The substance is toxic to the nervous system.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage.</p>
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May be fatal or cause blindness if swallowed. Animal: embryotoxic, passes through the placental barrier. (Methanol)
Special Remarks on Other Toxic Effects on Humans	Narcotic. (Methanol)
Exposure Limits	<p>Methanol</p> <p>TWA: 200 STEL: 250 (ppb) from ACGIH (TLV) [United States] [1997]</p> <p>TWA: 262 STEL: 328 (ppm) from ACGIH (TLV) [United States] [1997]</p> <p>2-Propanol, 1-methoxy-</p> <p>TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States]</p> <p>1-Propanol, 2-methoxy-</p> <p>TWA: 100 (ppb)</p> <p>Consult local authorities for acceptable exposure limits.</p>

Section 7. Preventive Measures

Personal Protection	Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill	Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.
Storage	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
TDG Classification	Class 3: Flammable liquid.
PIN	1263 PAINT PG: II
Special Provisions for Transport	Not available.
Federal and State Regulations	SARA 313 toxic chemical notification and release reporting: Methyl Alcohol 78.126% CERCLA: Hazardous substances.: Methyl Alcohol;
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
Other Classifications	<p>WHMIS (Canada)</p> <p>CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).</p> <p>CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).</p> <p>CLASS D-2B: Material causing other toxic effects (TOXIC).</p>

HCS (U.S.A.) Class: Flammable liquid having a flash point lower than 37.8°C (100°F).
Class: Target organ effects.

Hazardous Material Information System (U.S.A.)	Health Hazard	* 2
	Fire Hazard	3
	Reactivity	0
	Personal Protection	g
National Fire Protection Association (U.S.A.)	Health	2
	Fire Hazard	3
	Reactivity	0
	Specific Hazard	

Section 8. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
Hazardous Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Ingestion	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
Hazardous Ingestion	Not available.

Section 9. Preparation Information

References	-Manufacturers Material Safety Data Sheets.
Other Special Considerations	Not available.
Related Information	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
Preparation Information	Validated by A. McLeod on 11/9/2000. Verified by A. McLeod. Printed 9/18/2002.
Information Contact	Prepared by the Health, Safety and Environment Department, Chemcraft International Inc., P.O. Box 458, 155, Rose Glen Road North, Port Hope, ON, Canada. Phone: 905 885-6388 Fax: 905 885-5097

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.