

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **500-408 PERMATONE ORANGE**

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

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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

**Code** 500-408  
**Synonym** PERMATONE ORANGE  
**Chemical Name** Not applicable.  
**Chemical Family** Synthetic polymer in organic solvent. (Paint.)  
**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	<u>Exposure Limits</u>	
			LC <sub>50</sub> /LD <sub>50</sub>	TLV/PEL
Methyl alcohol	67-56-1	30-60	ORAL (LD50): Acute: 6200 mg/kg [Rat]. 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit].	<b>OSHA (Canada).</b> TWA: 200 ppm <b>ACGIH (Canada, 2000).</b> TWA: 200 ppm STEL: 250 ppm
Methyl ethyl ketone	78-93-3	30-60	ORAL (LD50): Acute: 3400 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	<b>ACGIH (Canada, 1993).</b> TWA: 590 mg/m <sup>3</sup> STEL: 585 mg/m <sup>3</sup> CEIL: 885 mg/m <sup>3</sup>
Propylene glycol monomethyl ether	107-98-2	1-5	ORAL (LD50): Acute: 5660 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	<b>ACGIH (Canada).</b> TWA: 100 ppm STEL: 150 ppm <b>OSHA (Canada).</b> TWA: 100 ppm STEL: 150 ppm TWA: 540 mg/m <sup>3</sup> STEL: 360 mg/m <sup>3</sup>

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: 72.65°C (162.8°F)

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<b>Melting Point</b>	May start to solidify at -85°C (-121°F) based on data for: 2-Butanone. Weighted average: -93.18°C (-135.7°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 0.8 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 12.2 kPa (91.8 mmHg) (at 20°C) (Methanol). Weighted average: 11.02 kPa (82.66 mmHg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 3.12 (Air = 1) (2-Propanol, 1-methoxy-). Weighted average: 1.7 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The lowest known value is 0.25 ppm (2-Butanone)
<b>Water/Oil Dist. Coeff.</b>	Not available.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	See solubility in water, methanol, diethyl ether, acetone.
<b>Solubility</b>	Easily soluble in cold water, hot water, methanol, diethyl ether, acetone.

### **Section 4. Fire and Explosion Hazard**

<b>The Product is:</b>	Flammable.
<b>Fire Hazards in Presence of Various Substances</b>	Extremely flammable in presence of open flames, sparks and static discharge.
<b>Fire Fighting Media and Instructions</b>	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.
<b>Special Remarks on Fire Hazards</b>	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)
<b>Flash Points</b>	The lowest known value is Closed cup: -6°C (21.2°F). (Tagliabue.). Open cup: -4°C (24.8°F). (2-Butanone)
<b>Flammable Limits</b>	The greatest known range is LOWER: 6% UPPER: 36.5% (Methanol)
<b>Auto-Ignition Temperature</b>	The lowest known value is 287°C (548.6°F) (2-Propanol, 1-methoxy-).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Extremely explosive in presence of open flames, sparks and static discharge.
<b>Special Remarks on Explosion Hazards</b>	Not available.

### **Section 5. Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Decomposition products</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Highly reactive with oxidizing agents. Slightly reactive to reactive with acids.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Air sensitive. (2-Propanol, 1-methoxy-)
<b>Special Remarks on Corrosivity</b>	Not available.

## Section 6. Toxicological Properties

<b>Routes of Entry</b>	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 3400 mg/kg [Rat]. (2-Butanone). Acute dermal toxicity (LD50): 13000 mg/kg [Rabbit]. (2-Butanone). Acute toxicity of the gas (LC50): 2000 ppm 4 hour(s) [Rat]. (2-Butanone). Acute toxicity of the vapor (LC50): 64000 ppm 4 hour(s) [Rat.]. (Methanol).
<b>Effects of Acute Exposure</b>	Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (permeator), of eye contact (irritant). Hazardous in case of skin contact (irritant), of inhalation. Inflammation of the eye is characterized by redness, watering, and itching.
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Butanone]. Classified 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol, 1-methoxy-]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to kidneys, the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	May be fatal or cause blindness if swallowed. Animal: embryotoxic, passes through the placental barrier. (Methanol)
<b>Special Remarks on Other Toxic Effects on Humans</b>	Narcotic. (Methanol)
<b>Exposure Limits</b>	Not available.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	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.
<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Small Spill</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill</b>	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.
<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Precautions</b>	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. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.
<b>Storage</b>	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).
<b>TDG Classification</b>	3
<b>PIN</b>	1263 PAINT <b>PG: II</b>
<b>Special Provisions for Transport</b>	

<b>Federal and State Regulations</b>	New York release reporting list: Methanol Rhode Island RTK hazardous substances: Methanol; 2-Propanol, 1-methoxy- Pennsylvania RTK: Methanol: (environmental hazard); 2-Propanol, 1-methoxy- Florida: Methanol; 2-Propanol, 1-methoxy- Minnesota: Methanol; 2-Propanol, 1-methoxy- Massachusetts RTK: Methanol; 2-Propanol, 1-methoxy- New Jersey: Methanol; 2-Propanol, 1-methoxy- TSCA 8(b) inventory: 2-Propanol, 1-methoxy- TSCA 8(d) H and S data reporting: 2-Propanol, 1-methoxy- SARA 302/304/311/312 hazardous chemicals: Methanol SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Methyl ethyl ketone: Fire Hazard, Immediate (Acute) Health Hazard SARA 313 toxic chemical notification and release reporting: Methanol 58.8%; Methyl ethyl ketone 34.3% CERCLA: Hazardous substances.: Methanol; Methyl ethyl ketone;	
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	<b>Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).</b> <b>Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).</b> <b>Class D-2A: Material causing other toxic effects (VERY TOXIC).</b> <b>Class D-2B: Material causing other toxic effects (TOXIC).</b>
	<b>HCS (U.S.A.)</b>	Class: Flammable liquid having a flash point lower than 37.8°C (100°F). Class: Irritating substance. Class: Target organ effects.
<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health Hazard</b>	* 2
	<b>Fire Hazard</b>	3
	<b>Reactivity</b>	0
	<b>Personal Protection</b>	H
<b>National Fire Protection Association (U.S.A.)</b>	<b>Health</b>	2
	<b>Fire Hazard</b>	3
	<b>Reactivity</b>	0
	<b>Specific Hazard</b>	

## Section 8. First Aid Measures

<b>Eye Contact</b>	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 immediately.
<b>Skin Contact</b>	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.
<b>Hazardous Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Hazardous Inhalation</b>	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. <b>WARNING:</b> It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.
<b>Ingestion</b>	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.
<b>Hazardous Ingestion</b>	Not available.

**Section 9. Preparation Information**

<b>References</b>	-Manufacturers Material Safety Data Sheets.
<b>Other Special Considerations</b>	Not available.
<b>Related Information</b>	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
<b>Preparation Information</b>	<b>Validated by C.M. Kelly on 10/2/2002.</b> <b>Verified by C.M. Kelly.</b> <b>Printed 10/3/2002.</b>
<b>Information Contact</b>	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.*