Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **500-404 PERMATONE BROWN**

Supplier - Manufacturer Chemcraft International Inc.,

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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	500-404
Synonym	PERMATONE BROWN
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

			Exposure Limits	
Name	**CAS #**	**% by Weight**	**LC_{50}/LD_{50}**	**TLV/PEL**
Methyl alcohol	67-56-1	60-100	ORAL (LD50): Acute: 6200 mg/kg [Rat.]. 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit.].	**OSHA (Canada).** TWA: 200 ppm **ACGIH (Canada, 2000).** 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].	TWA: 200 ppm 8 hour(s). STEL: 300 ppm 15 minute(s). CEIL: 300 ppm
Propylene glycol monomethyl ether	107-98-2	5-10	ORAL (LD50): Acute: 5660 mg/kg [Rat.]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit.].	**ACGIH (Canada).** TWA: 100 ppm STEL: 150 ppm

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: 72.64°C (162.8°F)				
Melting Point	May start to solidify at -85°C (-121°F) based on data for: 2-Butanone. Weighted average: -93.66°C (-136.6°F)				
Critical Temperature	Not available.				
Specific Gravity	Weighted average: 0.8 (Water = 1)				

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Vapor Pressure	The highest known value is 12.2 kPa (91.8 mmHg) (at 20°C) (Methanol). Weighted average: 10.98 kPa (82.36 mmHg) (at 20°C)
Vapor Density	The highest known value is 3.12 (Air = 1) (2-Propanol, 1-methoxy-). Weighted average: 1.66 (Air = 1)
Volatility	Not available.
Odor Threshold	The lowest known value is 0.25 ppm (2-Butanone)
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, acetone.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether, acetone. 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, sparks and static discharge.
Fire Fighting Media and Instructions	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: -6°C (21.2°F). (Tagliabue.). Open cup: -4°C (24.8°F). (2-Butanone)
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, CO2).
Explosion Hazards in Presence of Various Substances	Highly explosive in presence of open flames, sparks and static discharge.
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.
Corrosivity	Not available.
Special Remarks on Reactivity	Air sensitive. (2-Propanol, 1-methoxy-)
Special Remarks on Corrosivity	Not available.

Section 6. Toxicological Properties

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	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).
Effects of Acute Exposure	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.

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Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: 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-]. Classified 4 (Probably not for human.) by IARC, None. by OSHA [2-Furanmethanol, tetrahydro-]. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. The substance is toxic to the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage.
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	Not available.

Section 7. Preventive Measures

Personal Protection	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Chemical resistant gloves, such as Norfoil should be used when handling this product. Please consult a Glove Manufacturer for alternate choices.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Chemical resistant gloves, such as Norfoil should be used when handling this product. Please consult a Glove Manufacturer for alternate choices. 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 occupational exposure limits. 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	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.
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. 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.
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	3
PIN	1263 PAINT **PG:** II
Special Provisions for Transport	
Federal and State Regulations	New York release reporting list: Methanol Rhode Island RTK hazardous substances: Methanol Pennsylvania RTK: Methanol: (environmental hazard); 2-Propanol, 1-methoxy-; 1,2-Propanediol; Chromium compounds: (special hazard, environmental hazard); 2-Furanmethanol, tetrahydro- Florida: Methanol Minnesota: Methanol Massachusetts RTK: Methanol; 2-Propanol, 1-methoxy-; Chromium compounds; 2-Furanmethanol, tetrahydro- New Jersey: Methanol; 2-Propanol, 1-methoxy-; Chromium compounds 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; 1,2-Propanediol: Delayed (Chronic) Health Hazard SARA 313 toxic chemical notification and release reporting: Methanol 61.778%; Methyl ethyl ketone 30.448%; Chromium compounds 0.300364% CERCLA: Hazardous substances.: Methanol; Methyl ethyl ketone;
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

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Other Classifications	**WHMIS (Canada)**	**Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).** **Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).** **Class D-2A: Material causing other toxic effects (VERY TOXIC).** **Class D-2B: Material causing other toxic effects (TOXIC).**
	HCS (U.S.A.)	Class: Flammable liquid having a flash point lower than 37.8°C (100°F). Class: Irritating substance. Class: Target organ effects.

Hazardous Material Information System (U.S.A.)	**Health Hazard**	* 2
	Fire Hazard	3
	Reactivity	0
	Personal Protection	H
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 immediately.

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 immediate medical attention.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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. WARNING: 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.

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 C.M. Kelly on 9/24/2004.

Verified by C.M. Kelly.

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Notice to Reader

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