

Material Safety Data Sheet

500-407 PERMATONE BLUE

1. Product and company identification

Common name	: 500-407 PERMATONE BLUE
Synonym	: PERMATONE BLUE
Material uses	: Coatings: Surface coatings and finishes.
Manufacturer	: Chemcraft International, Inc. 155 Rose Glen Road North Port Hope, Ontario, Canada L1A 3Z3 Ph:905-885-6388 Fax:905-885-7587
Code	: 500-407
MSDS #	: Not available.
Validation date	: 1/3/2006.
Print date	: 1/18/2006.
Responsible name	: A. Davis
In case of emergency	: 1-613-996-6666

2. Hazards identification

Physical state	: Liquid.
Odor	: Not available.
Emergency overview	: Warning! CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: NERVOUS SYSTEM. Not applicable.
Routes of entry	: Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Eyes	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Potential chronic health effects	: CARCINOGENIC EFFECTS: Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [S151400 METHYL ETHYL KETONE]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanol, 1-methoxy-]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
Medical conditions aggravated by over-exposure	: Repeated or prolonged exposure to the substance can produce target organs damage.
Over-exposure signs/symptoms	: Not available.

See toxicological information (section 11)

3 . Composition/Information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Methanol	67-56-1	50 - 70
METHYL ETHYL KETONE	78-93-3	30 - 50
2-Propanol, 1-methoxy-	107-98-2	1 - 5

4 . First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

Antidote information

Product/ingredient name

Antidote information

Notes to physician : Not available.

5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂).
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Not available.
No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire Hazards in Presence of Various Substances** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
- Explosion Hazards in Presence of Various Substances** : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.

8 . Exposure controls/personal protection

Product name Exposure limits

Not available

Consult local authorities for acceptable exposure limits.

- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protection

- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Other protection** : Not available.
- Personal protective equipment (Pictograms)** :
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

Physical state	: Liquid.
Flash point	: The lowest known value is Closed cup: -4°C (24.8°F). (Tagliabue.). Open cup: -9°C (15.8°F). (S151400 METHYL ETHYL KETONE)
Auto-ignition temperature	: The lowest known value is 287°C (548.6°F) (2-Propanol, 1-methoxy-).
Flammable limits	: The greatest known range is Lower: 6% Upper: 36.5% (Methanol)
Color	: Not available.
Odor	: Not available.
Taste	: Not available.
Molecular weight	: Not applicable.
Molecular formula	: Not applicable.
pH	: Neutral.
Boiling/condensation point	: The lowest known value is 64.5°C (148.1°F) (Methanol). Weighted average: 72.65°C (162.8°F)
Melting/freezing point	: May start to solidify at -85°C (-121°F) based on data for: S151400 METHYL ETHYL KETONE. Weighted average: -93.18°C (-135.7°F)
Critical temperature	: Not available.
Relative density	: Weighted average: 0.8 (Water = 1)
Vapor pressure	: The highest known value is 12.2 kPa (91.8 mm Hg) (at 20°C) (Methanol). Weighted average: 11.02 kPa (82.66 mm Hg) (at 20°C)
Vapor density	: The highest known value is 3.12 (Air = 1) (2-Propanol, 1-methoxy-). Weighted average: 1.7 (Air = 1)
Volatility	: Not available.
Odor threshold	: The lowest known value is 0.25 ppm (S151400 METHYL ETHYL KETONE)
Evaporation rate	: Not available.
VOC	: Not available.
Viscosity	: Not available.
Ionicity (in water)	: Not available.
Dispersibility properties	: See solubility in water, methanol, diethyl ether, acetone.
Solubility	: Easily soluble in cold water, hot water, methanol, diethyl ether, acetone.
Physical/chemical properties comments	: Not available.

10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Highly reactive or incompatible with the following materials: oxidizing materials. Non-reactive or compatible with the following materials: reducing materials, combustible materials, metals, acids, alkalis and moisture.
Hazardous decomposition products	: Not available.
Hazardous polymerization	: Not available.
Conditions of reactivity	: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge.

11 . Toxicological information

Toxicity data

Chronic effects on humans : **CARCINOGENIC EFFECTS:** Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [S151400 METHYL ETHYL KETONE]. Classified 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanol, 1-methoxy-].
Contains material which causes damage to the following organs: the nervous system.

Other toxic effects on humans : Extremely hazardous in case of ingestion.
Very hazardous in case of skin contact (permeator), of inhalation.
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

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)

Specific effects

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Sensitization

Ingestion : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Synergistic products : Not available.

12 . Ecological information

Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
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Environmental precautions : No known significant effects or critical hazards.

Octanol/water partition coefficient : Not available.

Bioconcentration factor : Not available.

BOD and COD : Not available.

Biodegradable/OECD : Not available.

Mobility : Not available.

Products of degradation : These products are carbon oxides (CO, CO₂) and water.

Toxicity of the products of biodegradation : The product itself and its products of degradation are not toxic.

Special remarks on the products of biodegradation : Not available.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste stream : Not available.


RCRA classification : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Class	PG*	Label	Additional information
TDG Classification	1263 PAINT	3	II		-

PG* : Packing group

15. Regulatory information

WHMIS (Canada) : Class B-2: Flammable liquid
 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).
 CEPA DSL: Methanol; S151400 METHYL ETHYL KETONE; Glycol Ether PM; Savinyl Blue RS
 Canadian NPRI: Methanol

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Hazard symbol/symbols :

Risk phrases : This product is not classified according to EU legislation.

Safety phrases : Not applicable.

International regulations

International lists : No products were found.

16 . Other information

References	: - Manufacturer's Material Safety Data Sheet.
Other special considerations	: Not available.
Date of printing	: 1/18/2006.
Date of issue	: 1/3/2006.
Version	: 4

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.