

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **1 1 7 - 3 0 8 3 P L A S T I C O L O R ® B M H C 8 1**  
**MANCHESTERTAN(C39986)**

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

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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code 117-3083

Synonym PLASTICOLOR®BM HC81 MANCHESTERTAN  
(C39986)

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 <sub>50</sub> /LD <sub>50</sub>	TLV/PEL
Xylenes	1330-20-7	5 - 15	ORAL (LD50): Acute: 4300 mg/kg [Rat].	<b>ACGIH (United States, 1992).</b> TWA: 100 ppm STEL: 150 ppm TWA: 434 mg/m <sup>3</sup> STEL: 651 mg/m <sup>3</sup>
Isobutyl alcohol	78-83-1	5 - 15	ORAL (LD50): Acute: 2500 mg/kg [Rat.]. 3200 mg/kg [Mouse]. DERMAL (LD50): Acute: 4200 mg/kg [Rabbit.].	<b>ACGIH (United States, 1993).</b> TWA: 50 ppm
Isobutyl acetate	110-19-0	5 - 15	ORAL (LD50): Acute: 4763 mg/kg [Rabbit.]. 3200 mg/kg [Rat].	TWA: 150 ppm
Silica, amorphous	7631-86-9	1 - 5	ORAL (LD50): Acute: 3160 mg/kg [Rat.].	<b>OSHA (United States).</b> TWA: 6 mg/m <sup>3</sup>
Ethylbenzene	100-41-4	1 - 5	ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit.].	<b>ACGIH (United States).</b> TWA: 100 ppm STEL: 125 ppm <b>NIOSH</b> STEL: 125 ppm
Ethyl alcohol	64-17-5	1 - 5	ORAL (LD50): Acute: 7060 mg/kg [Rat.]. VAPOR (LC50): Acute: 8000 mg/l 4 hour/hours [Rat.].	<b>OSHA (United States).</b> TWA: 1000 ppm <b>ACGIH (United States).</b> TWA: 1000 ppm <b>NIOSH</b> TWA: 1000 ppm
Potential additional emission of formaldehyde	50-00-0*	0.1 - 1	ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL	<b>OSHA (United States).</b> STEL: 2 ppm

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Formaldehyde	50-00-0	0.1 - 1	(LD50): Acute: 270 mg/kg [Rabbit]. ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute: 270 mg/kg [Rabbit]. VAPOR (LC50): Acute: 250 mg/l 4 hour/hours [Rat]. 590 mg/l 4 hour/hours [Rat].	TWA: 0.75 ppm <b>OSHA (United States).</b> STEL: 2 ppm 8 hour/hours. <b>OSHA PEL (United States, 1995).</b> TWA: 0.75 ppm <b>OSHA action level (United States).</b> TWA: 0.5 ppm 8 hour/hours.
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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

<b>Physical State and Appearance</b>	Liquid.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Taste</b>	Not available.
<b>Molecular Weight</b>	Not applicable.
<b>pH (1% soln/water)</b>	Neutral.
<b>Boiling Point</b>	The lowest known value is 78.5°C (173.3°F) (Ethanol). Weighted average: 120.73°C (249.3°F)
<b>Melting Point</b>	May start to solidify at -94.9°C (-138.8°F) based on data for: Benzene, ethyl-. Weighted average: -104.01°C (-155.2°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 1.14 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 5.7 kPa (43 mm Hg) (at 20°C) (Ethanol). Weighted average: 1.41 kPa (10.58 mm Hg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 4 (Air = 1) (Acetic acid, 2-methylpropyl ester). Weighted average: 3.28 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The lowest known value is 0.3 ppm (Benzene, dimethyl-) Weighted average: 20.2 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is much more soluble in octanol.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	Not dispersible in cold water, hot water, methanol. See solubility in methanol, diethyl ether, n-octanol, acetone.
<b>Solubility</b>	Easily soluble in methanol, diethyl ether, n-octanol, acetone. Insoluble in cold water, hot water.

### Section 4. Fire and Explosion Hazard

<b>The Product is:</b>	Flammable.
<b>Fire Hazards in Presence of Various Substances</b>	Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Flammable in the presence of the following materials or conditions: heat. Slightly flammable in the presence of the following materials or conditions: oxidizing materials. Non-flammable in the presence of the following materials or conditions: reducing materials, combustible materials and moisture.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use dry chemical powder. LARGE FIRE: Use water spray or fog. Never direct a water jet into the container in order to prevent any splashing of the product, which could cause the fire to spread. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.
<b>Special Remarks on Fire Hazards</b>	Vapor may travel a considerable distance to source of ignition and flash back. (Benzene, dimethyl-)
<b>Flash Points</b>	The lowest known value is Closed cup: 12.78°C (55°F). Open cup: 12.78°C (55°F). (Cleveland). (Ethanol)
<b>Flammable Limits</b>	The greatest known range is Lower: 3.3% Upper: 19% (Ethanol)

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Auto-Ignition Temperature	The lowest known value is 416°C (780.8°F) (1-Propanol, 2-methyl-).
Products of Combustion	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> etc.). Some metallic oxides.
Explosion Hazards in Presence of Various Substances	Highly explosive in the presence of the following materials or conditions: 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 or incompatible with the following materials: oxidizing materials. Reactive or incompatible with the following materials: reducing materials, organic materials, metals, acids and alkalis.
Corrosivity	Not available.
Special Remarks on Reactivity	Incompatible with hydrogen fluoride. (Silica)
Special Remarks on Corrosivity	Not available.

## Section 6. Toxicological Properties

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 2500 mg/kg [Rat.]. (1-Propanol, 2-methyl-). Acute dermal toxicity (LD50): 4200 mg/kg [Rabbit.]. (1-Propanol, 2-methyl-). Acute toxicity of the vapor (LC50): 8000 mg/l 4 hour/hours [Rat.]. (Ethanol).
Effects of Acute Exposure	Hazardous in case of skin contact (permeator), of ingestion, of inhalation.
Chronic Effects on Humans	<b>CARCINOGENIC EFFECTS:</b> Classified None. by OSHA [Titanium dioxide (TiO <sub>2</sub> )]. Classified 3 (Not classifiable for humans.) by IARC [Titanium dioxide (TiO <sub>2</sub> )]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol]. Classified 1 (Proven for humans.) by IARC [Potential additional emission of formaldehyde]. Classified A2 (Suspected for humans.) by ACGIH, 2 (Reasonably anticipated to be human carcinogens.) by NTP [Potential additional emission of formaldehyde]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [1-Butanol]. Classified 1 (Proven for humans.) by IARC [Formaldehyde]. Classified A2 (Suspected for humans.) by ACGIH, 2 (Reasonably anticipated to be human carcinogens.) by NTP [Formaldehyde]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> PROVEN [Ethanol] The substance is toxic to the nervous system, the reproductive system, liver. Repeated or prolonged exposure to the substance can produce target organs damage.
Special Remarks on Toxicity to Animals	Formaldehyde has caused cancer in test animals at high concentrations (5-15 ppm). (Potential additional emission of formaldehyde)
Special Remarks on Chronic Effects on Humans	Prolonged or repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea and central nervous system depression. High level exposure to Xylene in laboratory animals, often at levels which are toxic to the mother, have affected the development of the fetus. The relevance of this to humans is not known. (Benzene, dimethyl-)
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. Material is irritating to mucous membranes and upper respiratory tract. (Benzene, dimethyl-)
Exposure Limits	Not available.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Impervious gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Gloves. Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product. Suggested protective clothing might not be adequate. 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 close to the workstation location.
<b>Small Spill</b>	Absorb with an inert material and transfer the spilled material and absorbent to 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 allow water to enter container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas. Dike if necessary. Call for assistance on disposal.
<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Precautions</b>	Keep locked up. 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. 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. 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>	<b>WARNING:</b> This product contains chemical/chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: Benzene, methyl-; Formaldehyde; Carbon Black <b>WARNING:</b> This product contains chemical/chemicals known to the state of California to cause birth defects or other reproductive harm.: Benzene, methyl- <b>WARNING:</b> This product contains chemical/chemicals known to the state of California to cause cancer.: Formaldehyde; Carbon Black Illinois toxic substances disclosure to employee act: Benzene, ethyl- New York acutely hazardous substances: Benzene, ethyl- Rhode Island RTK hazardous substances: Benzene, ethyl- Pennsylvania RTK: Acetic acid, 2-methylpropyl ester; Benzene, methyl-; Benzene, ethyl-; Benzene, dimethyl-; Ethanol; 1,2,4-Trimethylbenzene Florida: Benzene, ethyl- Minnesota: Benzene, ethyl-; Ethanol Massachusetts RTK: Acetic acid, 2-methylpropyl ester; Benzene, ethyl-; Ethanol New Jersey: Acetic acid, 2-methylpropyl ester; Benzene, methyl-; Benzene, ethyl-; Ethanol; 1,2,4-Trimethylbenzene TSCA 8(b) inventory: Acetic acid, 2-methylpropyl ester; Benzene, methyl-; Benzene, ethyl-; Benzene, dimethyl-; Ethanol; N-Butyl Alcohol TSCA 8(d) H and S data reporting: Benzene, ethyl- SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Acetic acid, 2-methylpropyl ester: Fire hazard, Immediate (acute) health hazard; Benzene, ethyl-: Fire hazard, Immediate (acute) health hazard; Benzene, dimethyl-: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Isobutyl alcohol: Fire hazard, Delayed (chronic) health hazard; 1-Propanol, 2-methyl-: Fire hazard, Delayed (chronic) health hazard CERCLA: Hazardous substances.: Acetic acid, 2-methylpropyl ester; Benzene, methyl-: 1000 lbs. (453.6 kg); Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-: 100 lbs. (45.36 kg); Isobutyl alcohol; 1-Propanol, 2-methyl-; N-Butyl Alcohol;
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**OSHA: Standard for Occupational Exposure to Formaldehyde 29CFR 1910.1048 must be consulted before initial use of product.**

Other Classifications	WHMIS (Canada)	Class B-2: Flammable liquid Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).
	HCS (U.S.A.)	Contains material which may cause cancer Target organ effects

Hazardous Material Information System (U.S.A.)	Health Hazard	* 1
	Fire Hazard	3
	Reactivity	0
	Personal Protection	G

National Fire Protection Association (U.S.A.)	Health	1
	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. Get medical attention.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops.
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	Move 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 if the tissues are damaged, a possible indication that 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 K. William on 11/8/2006. Verified by K. William. Printed 3/21/2008.
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

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MANCHESTERTAN(C39986**

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