

Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **390-891 CHEMSEAL**

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 390-891

Synonym CHEMSEAL

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	10-30	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]
Ethyl alcohol	64-17-5	1-5	ORAL (LD50): Acute: 7060 mg/kg [Rat.].	TWA: 1000 (ppb) from ACGIH (TLV) [United States]
Xylenes	1330-20-7	10-30	ORAL (LD50): Acute: 4300 mg/kg [Rat.].	TWA: 100 (ppm) from ACGIH (TLV) [United States] [1992] TWA: 150 (ppm) from ACGIH (TLV) [United States] STEL: 651 (mg/m ³) from ACGIH (TLV) [United States]
Toluene	108-88-3	10-30	ORAL (LD50): Acute: 2600 mg/kg [Rat.]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].	TWA: 200 CEIL: 300 (ppm) from OSHA (PEL) [United States] TWA: 50 (ppm) from ACGIH (TLV) [United States] [1999] TWA: 100 STEL: 150 (ppm) from NIOSH [United States] [1997] TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [Canada]
Isobutyl alcohol	78-83-1	0.1-1	ORAL (LD50): Acute: 2500 mg/kg [Rat.]. 3200 mg/kg [Mouse]. DERMAL (LD50): Acute: 4200 mg/kg [Rabbit].	TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993]
n-Butyl acetate	123-86-4	10-30	ORAL (LD50): Acute: 14130 mg/kg [Rat.]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994]
Nitrocellulose	9004-70-0	5-10	Not available.	Not available.

Continued on Next Page

Isopropanol	67-63-0	1-5	ORAL (LD50): Acute: 5045 mg/kg [Rat]. 4797 mg/kg [Dog]. 3600 mg/kg [Mouse]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit].	TWA: 400 STEL: 500 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994]
Ethylbenzene	100-41-4	0.1-1	ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	TWA: 100 CEIL: 125 (ppb) TWA: 435 CEIL: 545 (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: 110.79°C (231.4°F)
Melting Point	May start to solidify at -48°C (-54.4°F) based on data for: 1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich. Weighted average: -89.5°C (-129.1°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.9 (Water = 1)
Vapor Pressure	The highest known value is 12.2 kPa (@ 20°C) (Methanol). Weighted average: 4.34 kPa (@ 20°C)
Vapor Density	The highest known value is 4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich). Weighted average: 2.82 (Air = 1)
Volatility	Not available.
Odor Threshold	The highest known value is 22 ppm (2-Propanol) Weighted average: 2.39 ppm
Water/Oil Dist. Coeff.	The product is much more soluble in oil.
Ionicity (in Water)	Not available.
Dispersion Properties	Is not dispersed in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol, acetone.
Solubility	Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. Insoluble in cold water, hot water.

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. Flammable in presence of heat. Non-flammable in presence of shocks, of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
Fire Fighting Media and Instructions	Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back. (Benzene, methyl-)
Flash Points	The lowest known value is CLOSED CUP: 6°C (42.8°F). (Tagliabue.). OPEN CUP: 9°C (48.2°F). (Tagliabue). (Benzene, methyl-)
Flammable Limits	The greatest known range is LOWER: 6% UPPER: 36.5% (Methanol)
Auto-Ignition Temperature	The lowest known value is 407°C (764.6°F) (Acetic acid, butyl ester).
Products of Combustion	These products are carbon oxides (CO, CO2).
Explosion Hazards in Presence of Various Substances	Highly explosive in presence of open flames and sparks. Explosive in presence of shocks.
Special Remarks on Explosion Hazards	Not available.

Continued on Next Page

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Reactive with oxidizing agents, reducing agents, alkalis. Slightly reactive to reactive with organic materials, metals, acids. Non-reactive with combustible materials.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Incompatible with chlorinated compounds. (2-Propanol)
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-).
Effects of Acute Exposure	Very hazardous in case of skin contact (irritant, permeator), of ingestion. Hazardous in case of eye contact (irritant), of inhalation. Non-corrosive for skin.
Chronic Effects on Humans	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 A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [Acetic acid, ethyl ester]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [2-Propanol]. Classified 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [Octadecanoic acid, zinc salt]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethanol]. The substance is toxic to blood, 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	Not available.
Special Remarks on Chronic Effects on Humans	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Benzene, methyl-)
Special Remarks on Other Toxic Effects on Humans	Exposure can cause lung irritation, chest pain and oedema which may be fatal. (Benzene, methyl-)
Exposure Limits	Methanol TWA: 200 STEL: 250 (ppb) from ACGIH (TLV) [United States] [1997] TWA: 262 STEL: 328 (ppm) from ACGIH (TLV) [United States] [1997] Ethanol TWA: 1000 (ppb) from ACGIH (TLV) [United States] Acetic Acid, Ethyl Ester TWA: 400 (ppb) from ACGIH (TLV) [United States] Benzene, dimethyl- TWA: 100 (ppm) from ACGIH (TLV) [United States] [1992] TWA: 150 (ppm) from ACGIH (TLV) [United States] STEL: 651 (mg/m ³) from ACGIH (TLV) [United States] Benzene, methyl- TWA: 200 CEIL: 300 (ppm) from OSHA (PEL) [United States] TWA: 50 (ppm) from ACGIH (TLV) [United States] [1999] TWA: 100 STEL: 150 (ppm) from NIOSH [United States] [1997] TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [Canada] 1-Propanol, 2-methyl- TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993] Acetic Acid, Butyl Ester TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994] 2-Propanol TWA: 400 STEL: 500 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994]

Continued on Next Page

1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich

TWA: 5 (ppm)

Octadecanoic acid, zinc salt

TWA: 10 CEIL: 20 (ppm) from ACGIH (TLV) [United States]

Benzene, ethyl-

TWA: 100 CEIL: 125 (ppb)

TWA: 435 CEIL: 545 (ppm)

Consult local authorities for acceptable exposure limits.

Section 7. Preventive Measures

Personal Protection	Splash goggles. 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	Absorb with an inert material and put the spilled material in an appropriate waste disposal.	
Large Spill	Toxic flammable liquid, insoluble or very slightly soluble in water. 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 get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. 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 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/ vapour/spray. Take precautionary measures against electrostatic discharges. 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, reducing agents, alkalis.	
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	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Xylenes - mixed isomers; Benzene, methyl-; Benzene, ethyl- Pennsylvania RTK: Isopropyl alcohol Massachusetts RTK: Isopropyl alcohol New Jersey: Isopropyl alcohol TSCA 8(b) inventory: Ethanol; Ethyl Acetate; Xylenes - mixed isomers; Benzene, methyl-; Acetic acid, butyl ester; Isopropyl alcohol; Benzene, ethyl- SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Ethyl Acetate: fire, immediate health hazard; Xylenes - mixed isomers: fire, immediate health hazard; Isobutyl alcohol: fire, delayed health hazard; Benzene, ethyl-: fire, immediate health hazard SARA 313 toxic chemical notification and release reporting: Methyl Alcohol 17.4%; Xylenes - mixed isomers 10.24%; Benzene, methyl- 23.8%; Isopropyl alcohol 3.6%; Benzene, ethyl- 0.56% CERCLA: Hazardous substances.: Methyl Alcohol; Ethyl Acetate; Xylenes - mixed isomers; Benzene, methyl-; Isobutyl alcohol; Acetic acid, butyl ester;	
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
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).

Continued on Next Page

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.
 Class: Reproductive toxins.

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. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
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 A McLeod on 3/12/2001. 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.