

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **390-743 CHEMSEAL**

Supplier - Manufacturer **Chemcraft International Inc.,**  
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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code 390-743

Synonym CHEMSEAL

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
n-Butyl acetate	123-86-4	15 - 30	ORAL (LD50): Acute: 14130 mg/kg [Rat]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit]. 8770 mg/kg [Guinea pig].	<b>OSHA (Canada).</b> TWA: 150 ppm STEL: 200 ppm <b>ACGIH (Canada, 2000).</b> TWA: 150 ppm STEL: 200 ppm
Toluene	108-88-3	5 - 15	ORAL (LD50): Acute: 2600 mg/kg [Rat]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].	<b>ACGIH (Canada, 1993).</b> TWA: 50 ppm TWA: 188 mg/m <sup>3</sup>
Ethyl alcohol	64-17-5	5 - 15	ORAL (LD50): Acute: 7060 mg/kg [Rat].	<b>OSHA (Canada).</b> TWA: 1000 ppm <b>ACGIH (Canada).</b> TWA: 1000 ppm Not available.
1-Butanol	71-36-3	5 - 15	ORAL (LD50): Acute: 2510 mg/kg [Rat]. 790 mg/kg [Rat]. DERMAL (LD50): Acute: 5300 mg/kg [Rabbit]. 3400 mg/kg [Rabbit].	
Ethyl Acetate	141-78-6	5 - 15	ORAL (LD50): Acute: 5600 mg/kg [Rat].	<b>ACGIH (Canada).</b> TWA: 400 ppm
Xylenes	1330-20-7	1 - 5	ORAL (LD50): Acute: 4300 mg/kg [Rat].	<b>ACGIH (Canada, 1992).</b> TWA: 100 ppm STEL: 150 ppm TWA: 434 mg/m <sup>3</sup> STEL: 651 mg/m <sup>3</sup>
Isopropanol	67-63-0	1 - 5	ORAL (LD50): Acute: 5045 mg/kg [Rat]. 4797 mg/kg [Dog]. . 3600 mg/kg [Mouse]. DERMAL (LD50): Acute:	<b>ACGIH (Canada, 1994).</b> TWA: 400 ppm STEL: 500 ppm TWA: 983 mg/m <sup>3</sup>

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Ethylbenzene	100-41-4	1 - 5	12800 mg/kg [Rabbit]. ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	STEL: 1230 mg/m <sup>3</sup> <b>ACGIH (Canada)</b> TWA: 100 ppm STEL: 125 ppm
Potential additional emission of formaldehyde	50-00-0*	0.1 - 1	ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute: 270 mg/kg [Rabbit].	<b>OSHA (Canada)</b> STEL: 2 ppm TWA: 0.75 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

<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 77°C (170.6°F) (Acetic Acid, Ethyl Ester). Weighted average: 116.37°C (241.5°F)
<b>Melting Point</b>	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: -87.26°C (-125.1°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 0.93 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 9.7 kPa (73 mm Hg) (at 20°C) (Acetic Acid, Ethyl Ester). Weighted average: 3.98 kPa (29.85 mm Hg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 3.66 (Air = 1) (Benzene, ethyl-). Weighted average: 3.01 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The lowest known value is 0.04 ppm (Acetic Acid, Butyl Ester) Weighted average: 44.01 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>	Partially dispersed in methanol, diethyl ether. Is not dispersed in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol, acetone.
<b>Solubility</b>	Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. 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 presence of open flames, sparks and static discharge. Flammable in presence of heat.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use 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>	Vapor may travel considerable distance to source of ignition and flash back. (Acetic Acid, Butyl Ester)
<b>Flash Points</b>	The lowest known value is Closed cup: -1°C (30.2°F). (Tagliabue). Open cup: -0.5°C (31.1°F). (Tagliabue). (Acetic Acid, Ethyl Ester)
<b>Flammable Limits</b>	The greatest known range is Lower: 3.3% Upper: 19% (Ethanol)
<b>Auto-Ignition Temperature</b>	The lowest known value is 343°C (649.4°F) (1-Butanol).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).

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<b>Explosion Hazards in Presence of Various Substances</b>	Highly explosive in presence of open flames, sparks and static discharge. Explosive in presence of shocks.
<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>	Avoid contact with oxidizing agents. (Benzene, (1-methylethenyl)-)
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents, reducing agents. Slightly reactive to reactive with organic materials, metals, acids, alkalis.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Incompatible with chlorinated compounds. (2-Propanol)
<b>Special Remarks on Corrosivity</b>	Not available.

## Section 6. Toxicological Properties

<b>Routes of Entry</b>	Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 790 mg/kg [Rat]. (1-Butanol). Acute dermal toxicity (LD50): 3400 mg/kg [Rabbit]. (1-Butanol). Acute toxicity of the vapor (LC50): 8000 ppm 4 hour(s) [Rat.]. (Ethanol).
<b>Effects of Acute Exposure</b>	Hazardous in case of skin contact (permeator), of ingestion, of inhalation.
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [1-Butanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Acetic Acid, Ethyl Ester]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. Classified 4 (Probably not for human.) by IARC [Silica gel, pptd., cryst.-free]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> PROVEN [Ethanol] The substance is toxic to blood, the nervous system, the reproductive system. Repeated or prolonged exposure to the substance can produce target organs damage.
<b>Special Remarks on Toxicity to Animals</b>	Formaldehyde has caused cancer in test animals at high concentrations (5-15 ppm). (Formaldehyde)
<b>Special Remarks on Chronic Effects on Humans</b>	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. (Benzene, methyl-)
<b>Special Remarks on Other Toxic Effects on Humans</b>	Material is irritating to mucous membranes and upper respiratory tract. (Acetic Acid, Butyl Ester)
<b>Exposure Limits</b>	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. 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.

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<b>Small Spill</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.	
<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 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.	
<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. Take precautionary measures against electrostatic discharges. 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.	
<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>	<p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm: Benzene, methyl-; Formaldehyde</p> <p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause birth defects or other reproductive harm.: Benzene, methyl-</p> <p><b>WARNING:</b> This product contains chemical(s) known to the State of California to cause cancer.: Formaldehyde</p> <p>Illinois toxic substances disclosure to employee act: Benzene, ethyl-</p> <p>New York release reporting list: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>New York acutely hazardous substances: Benzene, ethyl-</p> <p>Rhode Island RTK hazardous substances: Benzene, ethyl-; Acetic Acid, Ethyl Ester</p> <p>Pennsylvania RTK: Benzene, methyl-; Benzene, ethyl-; Benzene, dimethyl-; Ethanol; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester; Isopropyl alcohol</p> <p>Florida: Benzene, ethyl-; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>Minnesota: Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>Massachusetts RTK: Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester; Isopropyl alcohol</p> <p>New Jersey: Benzene, methyl-; Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester; Isopropyl alcohol</p> <p>TSCA 8(b) inventory: Benzene, methyl-; N-Butyl Alcohol; Benzene, ethyl-; Benzene, dimethyl-; Ethanol; Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester; Isopropyl alcohol</p> <p>TSCA 5(e) substance consent order: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>TSCA 8(d) H and S data reporting: Benzene, ethyl-</p> <p>TSCA 12(b) annual export notification: Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester</p> <p>SARA 302/304/311/312 extremely hazardous substances: N-Butyl Alcohol; Isopropyl alcohol</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Benzene, methyl-: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Benzene, ethyl-: Fire hazard, Immediate (Acute) Health Hazard; Benzene, dimethyl-: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Acetic Acid, Ethyl Ester: Fire hazard, Immediate (Acute) Health Hazard; Acetic Acid, Butyl Ester; 2-Propanol: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard</p> <p>CERCLA: Hazardous substances.: Benzene, methyl-: 1000 lbs. (453.6 kg); N-Butyl Alcohol; Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-: 100 lbs. (45.36 kg); Acetic Acid, Ethyl Ester; Acetic Acid, Butyl Ester; Isobutyl alcohol;</p>	
<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). Class D-2A: Material causing other toxic effects (VERY TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).</b>
	<b>HCS (U.S.A.)</b>	Flammable liquid Irritating material Target organ effects

Hazardous Material Information System (U.S.A.)	Health Hazard	* 2
	Fire Hazard	3
	Reactivity	0
	Personal Protection	G
National Fire Protection Association (U.S.A.)	Health	1
	Fire Hazard	0
	Reactivity	0
	Specific Hazard	

## 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. Get medical attention.
<b>Skin Contact</b>	Wash with soap and water. Get medical attention if irritation develops.
<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 Florendo Tarnate on 9/16/2005.</b> <b>Verified by Florendo Tarnate.</b> <b>Printed 9/16/2005.</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

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