

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **546-5129 CHEMSEAL (C30983)**

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

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P.O. Box 458  
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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 546-5129

Synonym CHEMSEAL (C30983)

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
Toluene	108-88-3	30-60	ORAL (LD50): Acute: 2600 mg/kg [Rat]. DERMAL (LD50): Acute: 12210 mg/kg [Rabbit].	TWA: 200 (ppm) from OSHA (PEL) [United States] TWA: 50 (ppm) from ACGIH (TLV) [United States] [2000] TWA: 100 STEL: 150 (ppm) from NIOSH TWA: 375 STEL: 560 (mg/m <sup>3</sup> ) from NIOSH
Ethyl alcohol	64-17-5	5-10	ORAL (LD50): Acute: 7060 mg/kg [Rat].	TWA: 1000 (ppm) from OSHA (PEL) [United States] TWA: 1000 (ppm) from ACGIH (TLV) [United States] TWA: 1000 (ppm) from NIOSH
Ethyl Acetate	141-78-6	1-5	ORAL (LD50): Acute: 5600 mg/kg [Rat].	TWA: 400 from OSHA (PEL) [United States] TWA: 400 (ppm) from ACGIH (TLV) [United States] TWA: 400 (ppm) from NIOSH TWA: 1400 (mg/m <sup>3</sup> ) from NIOSH
Isopropanol	67-63-0	5-10	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]
Methyl isobutyl ketone	108-10-1	5-10	ORAL (LD50): Acute: 21000 mg/kg [Rat]. 2850 mg/kg [Mouse]. DERMAL (LD50): Acute: 20001 mg/kg [Rabbit].	TWA: 50 STEL: 75 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 205 STEL: 307 (ppm) from ACGIH (TLV) [United States] [1994]
Methyl ethyl ketone	78-93-3	5-10	ORAL (LD50): Acute: 3400 mg/kg	TWA: 200 STEL: 300 CEIL: 300

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Potential additional emission of formaldehyde	50-00-0*	0.1-1	[Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit]. ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute: 270 mg/kg [Rabbit].	(ppb) [1993] TWA: 590 STEL: 585 CEIL: 885 (ppm) from ACGIH (TLV) [United States] [1993] STEL: 2 (ppm) from OSHA (PEL) [United States] TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995] TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993]
Isobutyl alcohol	78-83-1	1-5	ORAL (LD50): Acute: 2500 mg/kg [Rat]. 3200 mg/kg [Mouse]. DERMAL (LD50): Acute: 4200 mg/kg [Rabbit].	STEL: 2 (ppm) from OSHA (PEL) [United States] TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995] TWA: 500 STEL: 750 (ppb) from ACGIH (TLV) [United States] [1997] TWA: 1188 STEL: 1782 (ppm) from ACGIH (TLV) [United States] [1997]
Formaldehyde	50-00-0	0.1-1	ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute: 270 mg/kg [Rabbit].	
Acetone	67-64-1	5-10	ORAL (LD50): Acute: 5800 mg/kg [Rat]. DERMAL (LD50): Acute: 20000 mg/kg [Rabbit].	

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 56.2°C (133.2°F) (2-Propanone). Weighted average: 97.96°C (208.3°F)
<b>Melting Point</b>	May start to solidify at -83°C (-117.4°F) based on data for: 2-Pentanone, 4-methyl-. Weighted average: -93.53°C (-136.4°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 0.88 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 24.8 kPa (@ 20°C) (2-Propanone). Weighted average: 5.71 kPa (@ 20°C)
<b>Vapor Density</b>	The highest known value is 3.5 (Air = 1) (2-Pentanone, 4-methyl-). Weighted average: 2.8 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The highest known value is 180 ppm (Ethanol) Weighted average: 39.6 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is much more soluble in oil.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	Partially dispersed in diethyl ether. Very slightly dispersed in methanol. Is not dispersed in cold water, hot water, n-octanol. See solubility in methanol, diethyl ether, n-octanol, acetone.
<b>Solubility</b>	Easily soluble in methanol, diethyl ether, acetone. Soluble en n-octanol. Insoluble in cold water, hot water.

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## 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 and sparks. Slightly flammable to 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.
<b>Fire Fighting Media and Instructions</b>	Flammable liquid, insoluble in water. 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. (Benzene, methyl-)
<b>Flash Points</b>	The lowest known value is CLOSED CUP: -18°C (-0.4°F). (T.C.C. ). (2-Propanone)
<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 416°C (780.8°F) (1-Propanol, 2-methyl-).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Highly explosive in presence of open flames and sparks.
<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>	Not available.
<b>Incompatibility with various substances</b>	Slightly reactive to reactive with oxidizing agents, reducing agents, organic materials, metals, acids, alkalis. Non-reactive with combustible materials.
<b>Corrosivity</b>	Not considered to be corrosive for metals and glass.
<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>	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 2500 mg/kg [Rat]. (1-Propanol, 2-methyl-). Acute dermal toxicity (LD50): 4200 mg/kg [Rabbit]. (1-Propanol, 2-methyl-).
<b>Effects of Acute Exposure</b>	Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant). Hazardous in case of ingestion, of inhalation. Non-corrosive for skin. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
<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 [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 A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [2-Butanone]. Classified 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP [Silica gel, pptd., cryst.-free]. Classified 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [Octadecanoic acid, zinc salt]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP [Potential additional emission of formaldehyde]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP [Formaldehyde]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [2-Propanone]. Classified D (Not classifiable for human or animal.) by EPA [2-Propanone]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Classified None. for human [2-Propanone]. <b>DEVELOPMENTAL TOXICITY:</b> Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethanol]. Classified Reproductive system/toxin/female, Reproductive

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system/toxin/male [PROVEN] [Potential additional emission of formaldehyde]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Formaldehyde].  
The substance is toxic to blood, kidneys, lungs, the nervous system, the reproductive system, liver.  
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). (Potential additional emission of 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>	Exposure can cause lung irritation, chest pain and oedema which may be fatal. (Benzene, methyl-)
<b>Exposure Limits</b>	<p><b>Benzene, methyl-</b> TWA: 200 (ppm) from OSHA (PEL) [United States] TWA: 50 (ppm) from ACGIH (TLV) [United States] [2000] TWA: 100 STEL: 150 (ppm) from NIOSH TWA: 375 STEL: 560 (mg/m<sup>3</sup>) from NIOSH</p> <p><b>Ethanol</b> TWA: 1000 (ppm) from OSHA (PEL) [United States] TWA: 1000 (ppm) from ACGIH (TLV) [United States] TWA: 1000 (ppm) from NIOSH</p> <p><b>Acetic acid, ethyl ester</b> TWA: 400 from OSHA (PEL) [United States] TWA: 400 (ppm) from ACGIH (TLV) [United States] TWA: 400 (ppm) from NIOSH TWA: 1400 (mg/m<sup>3</sup>) from NIOSH</p> <p><b>2-Propanol</b> TWA: 400 STEL: 500 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994]</p> <p><b>2-Pentanone, 4-methyl-</b> TWA: 50 STEL: 75 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 205 STEL: 307 (ppm) from ACGIH (TLV) [United States] [1994]</p> <p><b>2-Butanone</b> TWA: 200 STEL: 300 CEIL: 300 (ppb) [1993] TWA: 590 STEL: 585 CEIL: 885 (ppm) from ACGIH (TLV) [United States] [1993]</p> <p><b>1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich</b> TWA: 5 (ppm)</p> <p><b>Silica gel, pptd., cryst.-free</b> TWA: 10 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] [2000]</p> <p><b>Octadecanoic acid, zinc salt</b> TWA: 10 CEIL: 20 (ppm) from ACGIH (TLV) [United States]</p> <p><b>Potential additional emission of formaldehyde</b> STEL: 2 (ppm) from OSHA (PEL) [United States] TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995]</p> <p><b>1-Propanol, 2-methyl-</b> TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993]</p> <p><b>Formaldehyde</b> STEL: 2 (ppm) from OSHA (PEL) [United States] TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995]</p> <p><b>2-Propanone</b> TWA: 500 STEL: 750 (ppb) from ACGIH (TLV) [United States] [1997] TWA: 1188 STEL: 1782 (ppm) from ACGIH (TLV) [United States] [1997]</p>

Consult local authorities for acceptable exposure limits.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Splash goggles. 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 threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Small Spill</b>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.

<b>Large Spill</b>	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.	
<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.	
<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>	Class 3: Flammable liquid.	
<b>PIN</b>	1263 PAINT	<b>PG: II</b>
<b>Special Provisions for Transport</b>	Not available.	
<b>Federal and State Regulations</b>	<p>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: Benzene, methyl-; Formaldehyde</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Benzene, methyl-</p> <p>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Formaldehyde</p> <p>New York release reporting list: Benzene, methyl-; Acetic acid, ethyl ester</p> <p>Rhode Island RTK hazardous substances: Acetic acid, ethyl ester</p> <p>Pennsylvania RTK: Ethanol; Acetic acid, ethyl ester; Isopropyl alcohol; Silica gel, pptd., cryst.-free</p> <p>Florida: Benzene, methyl-; Acetic acid, ethyl ester</p> <p>Minnesota: Benzene, methyl-; Ethanol; Acetic acid, ethyl ester; Silica gel, pptd., cryst.-free</p> <p>Michigan critical material: Benzene, methyl-</p> <p>Massachusetts RTK: Benzene, methyl-; Ethanol; Acetic acid, ethyl ester; Isopropyl alcohol; Silica gel, pptd., cryst.-free</p> <p>New Jersey: Benzene, methyl-; Ethanol; Acetic acid, ethyl ester; Isopropyl alcohol</p> <p>TSCA 8(b) inventory: Benzene, methyl-; Ethanol; Acetic acid, ethyl ester; Isopropyl alcohol; Formaldehyde</p> <p>TSCA 5(e) substance consent order: Acetic acid, ethyl ester</p> <p>TSCA 8(d) H and S data reporting: Benzene, methyl-: October 4, 1992</p> <p>TSCA 12(b) annual export notification: Acetic acid, ethyl ester</p> <p>SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol; Formaldehyde</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Ethyl Acetate: fire, immediate health hazard; Methyl ethyl ketone: fire, immediate health hazard; Isobutyl alcohol: fire, delayed health hazard</p> <p>SARA 313 toxic chemical notification and release reporting: Benzene, methyl- 41.47%; Isopropyl alcohol 6.57%; Methyl isobutyl ketone 7.83%; Methyl ethyl ketone 7.4%; Formaldehyde 0.1126%; 2-Propanone 6.12%</p> <p>CERCLA: Hazardous substances.: Benzene, methyl-: 1000 lbs. (453.6 kg); Ethyl Acetate; Methyl isobutyl ketone; Methyl ethyl ketone; Isobutyl alcohol; 2-Propanone;</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).</b> <b>CLASS D-2A: Material causing other toxic effects (VERY TOXIC).</b> <b>CLASS D-2B: Material causing other toxic effects (TOXIC).</b>
	<b>HCS (U.S.A.)</b>	Class: Contains material which may cause cancer. Class: Flammable liquid having a flash point lower than 37.8°C (100°F). Class: Irritating substance. Class: Target organ effects. Class: Reproductive toxins.
<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health Hazard</b>	* 2
	<b>Fire Hazard</b>	3
	<b>Reactivity</b>	0
	<b>Personal Protection</b>	h

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National Fire Protection Association (U.S.A.)	Health	2
	Fire Hazard	3
	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 immediately.
<b>Skin Contact</b>	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.
<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 Alfreda Kowalski on 1/28/2005.</b> <b>Verified by Alfreda Kowalski.</b> <b>Printed 2/1/2005.</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

*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.*