

# Material Safety Data Sheet

## Section 1. Product Identification and Use

**Product Name - Trade Name**      **431-9120 OPTICLEAR**

**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

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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

**Code**      431-9120

**Synonym**      OPTICLEAR

**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

<b>Name</b>	<b>CAS #</b>	<b>% by Weight</b>	<b>LC<sub>50</sub>/LD<sub>50</sub></b>	<b>TLV/PEL</b>
n-Butyl acetate	123-86-4	30 - 50	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
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 (Canada, 1993).</b> TWA: 50 ppm
Isopropanol	67-63-0	5 - 15	ORAL (LD50): Acute: 5045 mg/kg [Rat]. 4797 mg/kg [Dog] . 3600 mg/kg [Mouse]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit].	<b>ACGIH (Canada, 1994).</b> TWA: 400 ppm STEL: 500 ppm TWA: 983 mg/m <sup>3</sup> STEL: 1230 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
Ethyl Acetate	141-78-6	1 - 5	ORAL (LD50): Acute: 5600 mg/kg [Rat].	<b>ACGIH (Canada).</b> TWA: 400 ppm
Propylene glycol monomethyl ether	107-98-2	1 - 5	ORAL (LD50): Acute: 5660 mg/kg [Rat]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	<b>ACGIH (Canada).</b> TWA: 100 ppm STEL: 150 ppm
Silica, amorphous	7631-86-9	1 - 5	ORAL (LD50): Acute: 3160 mg/kg [Rat].	<b>OSHA (Canada).</b> TWA: 6 mg/m <sup>3</sup>
Potential additional emission of formaldehyde	50-00-0*	0.1 - 1	ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute: 270 mg/kg	<b>OSHA (Canada).</b> STEL: 2 ppm TWA: 0.75 ppm

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Xylenes	1330-20-7	0.1 - 1	[Rabbit]. 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>
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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 77°C (170.6°F) (Acetic Acid, Ethyl Ester). Weighted average: 115.09°C (239.2°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: -88.05°C (-126.5°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	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: 3.55 kPa (26.63 mm Hg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich). Weighted average: 3.05 (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: 26.88 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is 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. Partially 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, 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 287°C (548.6°F) (2-Propanol, 1-methoxy-).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ). Some metallic oxides.
<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.

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Special Remarks on Explosion Hazards Not available.

## Section 5. Reactivity Data

**Stability** The product is stable.

**Decomposition products** Not available.

**Conditions of Instability** Avoid contact with oxidizing agents. (Benzene, (1-methylethenyl)-)

**Incompatibility with various substances** Reactive with oxidizing agents, acids, alkalis. Slightly reactive to reactive with reducing agents, metals.

**Corrosivity** Not available.

**Special Remarks on Reactivity** Incompatible with chlorinated compounds. (2-Propanol)

**Special Remarks on Corrosivity** Corrosive to ferrous metals and alloys. (Phosphoric acid)

## 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 ppm 4 hour(s) [Rat.]. (Ethanol).

**Effects of Acute Exposure** Hazardous in case of skin contact (corrosive), of ingestion, of inhalation. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

**Chronic Effects on Humans** **CARCINOGENIC EFFECTS:** Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol]. 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 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol, 1-methoxy-]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Phosphoric acid, monobutyl ester]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde].  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.  
**DEVELOPMENTAL TOXICITY:** PROVEN [Ethanol]  
The substance is toxic to blood, kidneys, the nervous system, the reproductive system, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection.

**Special Remarks on Toxicity to Animals** Formaldehyde has caused cancer in test animals at high concentrations (5-15 ppm). (Formaldehyde)

**Special Remarks on Chronic Effects on Humans** 0070 Passes through the placental barrier in human. (1-Propanol, 2-methyl-)

**Special Remarks on Other Toxic Effects on Humans** Material is irritating to mucous membranes and upper respiratory tract. (Acetic Acid, Butyl Ester)

**Exposure Limits** Not available.

## Section 7. Preventive Measures

<b>Personal Protection</b>	Splash goggles. Synthetic apron. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Neoprene gloves.	
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Vapor respirator. Boots. Neoprene 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.	
<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. Use water spray curtain to divert vapor drift. 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 container dry. 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. Never add water to this product. 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, acids, alkalis.	
<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:</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: Formaldehyde</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, Butyl Ester; Acetic Acid, Ethyl 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: Acetic Acid, Butyl Ester; Isopropyl alcohol; Benzene, ethyl-; Benzene, dimethyl-; Ethanol; Acetic Acid, Ethyl Ester; 2-Propanol, 1-methoxy-</p> <p>Florida: Acetic Acid, Butyl Ester; Benzene, ethyl-; Acetic Acid, Ethyl Ester</p> <p>Minnesota: Acetic Acid, Butyl Ester; Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester</p> <p>Massachusetts RTK: Acetic Acid, Butyl Ester; Isopropyl alcohol; Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester; 2-Propanol, 1-methoxy-</p> <p>New Jersey: Acetic Acid, Butyl Ester; Isopropyl alcohol; Benzene, ethyl-; Ethanol; Acetic Acid, Ethyl Ester; 2-Propanol, 1-methoxy-</p> <p>TSCA 8(b) inventory: Acetic Acid, Butyl Ester; Isopropyl alcohol; Benzene, ethyl-; Benzene, dimethyl-; N-Butyl Alcohol; Ethanol; Acetic Acid, Ethyl Ester</p> <p>TSCA 5(e) substance consent order: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester</p> <p>TSCA 8(d) H and S data reporting: Benzene, ethyl-</p> <p>TSCA 12(b) annual export notification: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester</p> <p>SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Acetic Acid, Butyl Ester; Isobutyl alcohol: Fire hazard, Delayed (Chronic) Health Hazard; 2-Propanol: Fire hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Acetic Acid, Ethyl Ester: Fire hazard, Immediate (Acute) Health Hazard</p> <p>CERCLA: Hazardous substances.: Acetic Acid, Butyl Ester; Isobutyl alcohol; Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-: 100 lbs. (45.36 kg); N-Butyl Alcohol; Acetic Acid, Ethyl Ester;</p>	
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	

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Other Classifications	WHMIS (Canada)	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).
	HCS (U.S.A.)	Flammable liquid Target organ effects Corrosive Material
Hazardous Material Information System (U.S.A.)	Health Hazard	* 3
	Fire Hazard	3
	Reactivity	0
	Personal Protection	H
National Fire Protection Association (U.S.A.)	Health	3
	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.
<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 immediate 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

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