

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **431-9390 OPTICLEAR GLOSS**

Supplier - Manufacturer **Chemcraft International Inc.,**  
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P.O. Box 458  
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Canada L1A 3Z3

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### For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code 431-9390

Synonym OPTICLEAR GLOSS

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

Name	CAS #	% by Weight	Exposure Limits	
			LC <sub>50</sub> /LD <sub>50</sub>	TLV/PEL
Isobutyl alcohol	78-83-1	10-30	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]
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]
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]
Ethyl Acetate	141-78-6	1-5	ORAL (LD50): Acute: 5600 mg/kg [Rat.].	TWA: 1000 (ppm) from NIOSH 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
Propylene glycol monomethyl ether	107-98-2	1-5	ORAL (LD50): Acute: 5660 mg/kg [Rat.]. DERMAL (LD50): Acute: 13000 mg/kg [Rabbit].	TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States] TWA: 100 STEL: 150 (ppm) from NIOSH TWA: 360 STEL: 540 (mg/m <sup>3</sup> ) from NIOSH TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [United States] TWA: 540 STEL: 360 (mg/m <sup>3</sup> )

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Nitrocellulose	9004-70-0	5-10	Not available.	from OSHA (PEL) [United States]
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]. 8770 mg/kg [Guinea pig].	Not available. TWA: 150 STEL: 200 (ppm) from OSHA (PEL) [United States]
Isobutyl acetate	110-19-0	1-5	ORAL (LD50): Acute: 4763 mg/kg [Rabbit.]. 3200 mg/kg [Rat].	TWA: 150 STEL: 200 (ppm) from ACGIH (TLV) [United States] [2000] TWA: 150 STEL: 200 (ppm) from NIOSH TWA: 150 (ppb)
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].	STEL: 2 (ppm) from OSHA (PEL) [United States] TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995]

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: 115.6°C (240.1°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: -88.84°C (-127.9°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 (@ 20°C) (Acetic acid, ethyl ester). Weighted average: 3.47 kPa (@ 20°C)
<b>Vapor Density</b>	The highest known value is 4 (Air = 1) (Acetic acid, butyl ester). Weighted average: 3.11 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The highest known value is 180 ppm (Ethanol) Weighted average: 28.53 ppm
<b>Water/Oil Dist. Coeff.</b>	The product is more soluble in oil.
<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 and sparks, of heat. Non-flammable in presence of shocks, of oxidizing materials, 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. (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)

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<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> ).
<b>Explosion Hazards in Presence of Various Substances</b>	Highly explosive in presence of open flames and sparks. Explosive in presence of shocks. Non-explosive in presence of reducing materials, of combustible materials, of organic materials, of metals, of acids, of alkalis, of moisture.
<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, acids, alkalis. Slightly reactive to reactive with reducing agents, organic materials, metals. Non-reactive with moisture.
<b>Corrosivity</b>	Non-corrosive in presence of glass, of aluminum, of zinc, of copper, of stainless steel(304), of stainless steel(316).
<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. 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), of eye contact (irritant). Hazardous in case of skin contact (corrosive), of ingestion, of inhalation. 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 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 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, 4 (No evidence.) by NTP, None. by OSHA [2-Propanol, 1-methoxy-]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP [Potential additional emission of formaldehyde]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC [Phosphoric acid, monobutyl ester]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Ethanol]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Potential additional emission of 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>	0070 Passes through the placental barrier in human. (1-Propanol, 2-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>	<b>1-Propanol, 2-methyl-</b> TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993] <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] <b>Ethanol</b> TWA: 1000 (ppm) from OSHA (PEL) [United States] TWA: 1000 (ppm) from ACGIH (TLV) [United States]

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TWA: 1000 (ppm) from NIOSH

**Acetic acid, ethyl ester**

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

**2-Propanol, 1-methoxy-**

TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States]

TWA: 100 STEL: 150 (ppm) from NIOSH

TWA: 360 STEL: 540 (mg/m<sup>3</sup>) from NIOSH

TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [United States]

TWA: 540 STEL: 360 (mg/m<sup>3</sup>) from OSHA (PEL) [United States]

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

TWA: 5 (ppm)

**2-Pentanone, 4-methyl-**

TWA: 50 STEL: 75 (ppb) from ACGIH (TLV) [United States] [1994]

TWA: 205 STEL: 307 (ppm) from ACGIH (TLV) [United States] [1994]

**Acetic acid, butyl ester**

TWA: 150 STEL: 200 (ppm) from OSHA (PEL) [United States]

TWA: 150 STEL: 200 (ppm) from ACGIH (TLV) [United States] [2000]

TWA: 150 STEL: 200 (ppm) from NIOSH

**Acetic acid, 2-methylpropyl ester**

TWA: 150 (ppb)

**Potential additional emission of formaldehyde**

STEL: 2 (ppm) from OSHA (PEL) [United States]

TWA: 0.75 (ppm) from OSHA (PEL) [United States] [1995]

**Dibutyl phosphate**

TWA: 1 CEIL: 2 (ppb)

TWA: 5 CEIL: 10 (ppm)

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 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>	Class 3: Flammable liquid.
<b>PIN</b>	1263 PAINT <b>PG: II</b>
<b>Special Provisions for Transport</b>	Not available.

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**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: Isobutyl alcohol; Potential additional emission of formaldehyde; Formaldehyde; XYLENE  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Isobutyl alcohol  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (male) which would require a warning under the statute: Isobutyl alcohol  
 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: Isobutyl alcohol; Potential additional emission of formaldehyde; Formaldehyde  
 Illinois toxic substances disclosure to employee act: Benzene, ethyl-  
 New York release reporting list: Acetic acid, ethyl ester; Acetic acid, butyl ester; Benzene, 1,3-dimethyl-  
 New York acutely hazardous substances: Benzene, ethyl-  
 Rhode Island RTK hazardous substances: Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Benzene, ethyl-  
 Pennsylvania RTK: Isopropyl alcohol; Ethanol; Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Isobutyl Acetate  
 Florida: Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Benzene, ethyl-; Benzene, 1,3-dimethyl-  
 Minnesota: Ethanol; Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Benzene, ethyl-  
 Massachusetts RTK: Isopropyl alcohol; Ethanol; Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Isobutyl Acetate; Benzene, ethyl-; Benzene, 1,3-dimethyl-  
 New Jersey: Isopropyl alcohol; Ethanol; Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Isobutyl Acetate; Benzene, ethyl-  
 TSCA 8(b) inventory: Isopropyl alcohol; Ethanol; Acetic acid, ethyl ester; 2-Propanol, 1-methoxy-; Acetic acid, butyl ester; Isobutyl Acetate; Formaldehyde; XYLENE; N-Butyl Alcohol  
 TSCA 5(e) substance consent order: Acetic acid, ethyl ester; Acetic acid, butyl ester  
 TSCA 8(d) H and S data reporting: 2-Propanol, 1-methoxy-; Benzene, ethyl-  
 TSCA 12(b) annual export notification: Acetic acid, ethyl ester; Acetic acid, butyl ester  
 SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol; Formaldehyde; N-Butyl Alcohol  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Isobutyl alcohol: fire, immediate health hazard; Ethyl Acetate: fire, immediate health hazard; Isobutyl Acetate: fire, immediate health hazard; XYLENE: fire, immediate health hazard  
 SARA 313 toxic chemical notification and release reporting: Isopropyl alcohol 7.866%; Methyl isobutyl ketone 0.425%  
 CERCLA: Hazardous substances.: Isobutyl alcohol; Ethyl Acetate; Methyl isobutyl ketone; Acetic acid, butyl ester; Isobutyl Acetate; XYLENE; N-Butyl Alcohol;

**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-2A: Material causing other toxic effects (VERY TOXIC).  
 CLASS D-2B: Material causing other toxic effects (TOXIC).  
**HCS (U.S.A.)** 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.

**Hazardous Material Information System (U.S.A.)**

<b>Health Hazard</b>	* 3
<b>Fire Hazard</b>	3
<b>Reactivity</b>	0
<b>Personal Protection</b>	h

**National Fire Protection Association (U.S.A.)**

<b>Health</b>	3
<b>Fire Hazard</b>	3
<b>Reactivity</b>	0
<b>Specific Hazard</b>	

## 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 C.M. Kelly on 5/7/2002.</b> <b>Verified by C.M. Kelly.</b> <b>Printed 9/18/2002.</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.*