

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **431-2010 ES LACQUER ELITE FLAT(C28637)**

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

155 Rose Glen Road North  
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** 431-2010  
**Synonym** ES LACQUER ELITE FLAT  
**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	5-10	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>
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].	<b>OSHA (Canada).</b> TWA: 200 ppm <b>ACGIH (Canada, 2000).</b> TWA: 200 ppm STEL: 250 ppm
Ethylbenzene	100-41-4	1-5	ORAL (LD50): Acute: 3500 mg/kg [Rat.]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	<b>ACGIH (Canada).</b> TWA: 100 ppm STEL: 125 ppm
Xylenes	1330-20-7	10-30	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>
Isobutyl alcohol	78-83-1	5-10	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	5-10	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>
Isobutyl acetate	110-19-0	10-30	ORAL (LD50): Acute: 4763 mg/kg [Rabbit]. 3200 mg/kg [Rat].	Not available.
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>
Ethyl Acetate	141-78-6	5-10	ORAL (LD50): Acute: 5600 mg/kg [Rat].	<b>ACGIH (Canada).</b> TWA: 400 ppm
Potential additional emission of formaldehyde	50-00-0*	0.1-1	ORAL (LD50): Acute: 100 mg/kg [Rat]. DERMAL (LD50): Acute:	<b>OSHA (Canada).</b> STEL: 2 ppm

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270 mg/kg [Rabbit].

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 64.5°C (148.1°F) (Methanol). Weighted average: 111.08°C (231.9°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: -93.69°C (-136.6°F)				
<b>Critical Temperature</b>	Not available.				
<b>Specific Gravity</b>	Weighted average: 0.92 (Water = 1)				
<b>Vapor Pressure</b>	The highest known value is 12.2 kPa (91.8 mmHg) (at 20°C) (Methanol). Weighted average: 4.46 kPa (33.45 mmHg) (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: 2.89 (Air = 1)				
<b>Volatility</b>	Not available.				
<b>Odor Threshold</b>	The lowest known value is 0.3 ppm (Benzene, dimethyl-) Weighted average: 3.37 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, n-octanol, acetone. 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. When heated to decomposition it emits acrid smoke and fumes. (Acetic acid, 2-methylpropyl 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: 6% UPPER: 36.5% (Methanol)
<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> ). 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.
<b>Special Remarks on Explosion Hazards</b>	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	Highly reactive with oxidizing agents. Reactive with alkalis. Slightly reactive to reactive with reducing agents, organic materials, metals, acids.
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	Absorbed through skin. 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): 3500 ppm 4 hour(s) [Rat.]. (Acetic acid, 2-methylpropyl ester).
Effects of Acute Exposure	Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of skin contact (permeator), of inhalation. Slightly hazardous in case of skin contact (corrosive). 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. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Chronic Effects on Humans	<b>CARCINOGENIC EFFECTS:</b> Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, None. by OSHA [2-Propanol]. 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 [Phosphoric acid, monobutyl ester]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. <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] [Formaldehyde]. The substance is toxic to the nervous 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	May be fatal or cause blindness if swallowed. Animal: embryotoxic, passes through the placental barrier. (Methanol)
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract. (Acetic acid, 2-methylpropyl ester)
Exposure Limits	Not available.

## Section 7. Preventive Measures

Personal Protection	Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Chemical resistant gloves, such as Norfoil should be used when handling this product. Please consult a Glove Manufacturer for alternate choices. Boots.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Vapor respirator. Boots. Chemical resistant gloves, such as Norfoil should be used when handling this product. Please consult a Glove Manufacturer for alternate choices. 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, 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: II</b>
<b>Special Provisions for Transport</b>	
<b>Federal and State Regulations</b>	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; Benzene, methyl-; Formaldehyde 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: Benzene 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; Benzene, methyl- 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: Benzene; Formaldehyde Illinois toxic substances disclosure to employee act: Benzene, ethyl- New York release reporting list: Methanol; Acetic Acid, Ethyl Ester New York acutely hazardous substances: Benzene, ethyl- Rhode Island RTK hazardous substances: Methanol; Benzene, ethyl-; Acetic Acid, Ethyl Ester Pennsylvania RTK: Benzene, methyl-; Methanol: (environmental hazard); Benzene, ethyl-; Benzene, dimethyl-; Isopropyl alcohol; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester Florida: Methanol; Benzene, ethyl-; Acetic Acid, Ethyl Ester Minnesota: Methanol; Benzene, ethyl-; Acetic Acid, Ethyl Ester Massachusetts RTK: Methanol; Benzene, ethyl-; Isopropyl alcohol; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester New Jersey: Benzene, methyl-; Methanol; Benzene, ethyl-; Isopropyl alcohol; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester TSCA 8(b) inventory: Benzene, methyl-; Benzene, ethyl-; Benzene, dimethyl-; Isopropyl alcohol; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester; N-Butyl Alcohol TSCA 5(e) substance consent order: Acetic Acid, Ethyl Ester TSCA 8(d) H and S data reporting: Benzene, ethyl- TSCA 12(b) annual export notification: Acetic Acid, Ethyl Ester SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol; N-Butyl Alcohol; Formaldehyde SARA 302/304/311/312 hazardous chemicals: Methanol 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; Isobutyl alcohol: Fire Hazard, Delayed (Chronic) Health Hazard; 2-Propanol: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Acetic acid, 2-methylpropyl ester: Fire Hazard, Immediate (Acute) Health Hazard; Acetic Acid, Ethyl Ester: Fire Hazard, Immediate (Acute) Health Hazard SARA 313 toxic chemical notification and release reporting: Benzene, methyl- 5.61856%; Methanol 14.74%; Benzene, ethyl- 3.418%; Benzene, dimethyl- 13.5079%; Isopropyl alcohol 5.3115% CERCLA: Hazardous substances.: Benzene, methyl-: 1000 lbs. (453.6 kg); Methanol; Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-: 100 lbs. (45.36 kg); Isobutyl alcohol; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester; N-Butyl Alcohol;
<b>Other Regulations</b>	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).

HCS (U.S.A.) Class: Flammable liquid having a flash point lower than 37.8°C (100°F).  
Class: Target organ effects.  
Class: Corrosive material

Hazardous Material Information System (U.S.A.) Health Hazard \* 3  
Fire Hazard 3  
Reactivity 0  
Personal Protection

National Fire Protection Association (U.S.A.) Health 3  
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 immediately.

**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 immediate 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 C.M. Kelly on 12/15/2004.  
Verified by C.M. Kelly.  
Printed 12/15/2004.

**Information Contact** Prepared by the Health, Safety and Environment Department,  
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**Notice to Reader**

**431-2010 ES LACQUER ELITE  
FLAT(C28637)**

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