

Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **355-835 E.S. LACQUER SATIN**

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

155 Rose Glen Road North
P.O. Box 458
Port Hope, ON.
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 355-835

Synonym E.S. LACQUER SATIN

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 ₅₀ /LD ₅₀	TLV/PEL
n-Butyl acetate		10-30	ORAL (LD50): Acute: 14130 mg/kg [Rat.]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994]
Toluene	108-88-3	5-10	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 ³) from NIOSH
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].	TWA: 200 (ppm) from OSHA (PEL) [United States] TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] [2000] TWA: 200 STEL: 250 (ppm) from NIOSH [1997] TWA: 260 STEL: 325 (mg/m ³) from NIOSH
Xylenes	1330-20-7	10-30	ORAL (LD50): Acute: 4300 mg/kg [Rat.].	TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) [United States] [1992] TWA: 434 STEL: 651 (ppm) from ACGIH (TLV) [United States] [1992]
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].	TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993]
Nitrocellulose	9004-70-0	5-10	Not available.	Not available.
Isopropanol	67-63-0	5-10	ORAL (LD50): Acute: 5045 mg/kg	TWA: 400 STEL: 500 (ppb)

Continued on Next Page

Ethylbenzene	100-41-4	0.1-1	[Rat]. 4797 mg/kg [Dog]. 3600 mg/kg [Mouse]. DERMAL (LD50): Acute: 12800 mg/kg [Rabbit]. ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	from ACGIH (TLV) [United States] [1994] TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994] TWA: 100 (ppm) from OSHA (PEL) [United States] TWA: 100 STEL: 125 (ppm) from ACGIH (TLV) [United States] STEL: 545 (ppm) from NIOSH STEL: 125 (ppm) from NIOSH
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].	TWA: 1 STEL: 2 (ppb) from ACGIH (TLV) [United States] [1989]
Acetone	67-64-1	5-10	ORAL (LD50): Acute: 5800 mg/kg [Rat]. DERMAL (LD50): Acute: 20000 mg/kg [Rabbit].	TWA: 500 STEL: 750 (ppb) from ACGIH (TLV) [United States] [1997] TWA: 1188 STEL: 1782 (ppm) from ACGIH (TLV) [United States] [1997]

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

Physical State and Appearance	Liquid.
Color	Not available. Odor Not available. Taste Not available.
Molecular Weight	Not applicable.
pH (1% soln/water)	Neutral.
Boiling Point	The lowest known value is 56.2°C (133.2°F) (2-Propanone). Weighted average: 112.14°C (233.9°F)
Melting Point	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: -88.38°C (-127.1°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.9 (Water = 1)
Vapor Pressure	The highest known value is 24.8 kPa (@ 20°C) (2-Propanone). Weighted average: 5.55 kPa (@ 20°C)
Vapor Density	The highest known value is 2 (Air = 1) (2-Propanone). Weighted average: 2.81 (Air = 1)
Volatility	Not available.
Odor Threshold	The highest known value is 22 ppm (2-Propanol) Weighted average: 2.82 ppm
Water/Oil Dist. Coeff.	The product is much more soluble in oil.
Ionicity (in Water)	Not available.
Dispersion Properties	Is not dispersed in cold water, hot water, methanol, diethyl ether, n-octanol. See solubility in methanol, diethyl ether, n-octanol, acetone.
Solubility	Easily soluble in methanol, diethyl ether, n-octanol, acetone. Insoluble in cold water, hot water.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks. 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.
Fire Fighting Media and Instructions	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.

Continued on Next Page

Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back. (Acetic acid, butyl ester)
Flash Points	The lowest known value is CLOSED CUP: -18°C (-0.4°F). (T.C.C.). (2-Propanone)
Flammable Limits	The greatest known range is LOWER: 6% UPPER: 36.5% (Methanol)
Auto-Ignition Temperature	The lowest known value is 407°C (764.6°F) (Acetic acid, butyl ester).
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Explosion Hazards in Presence of Various Substances	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.
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	Highly reactive with oxidizing agents. Reactive with reducing agents, acids, alkalis. Slightly reactive to reactive with organic materials, metals. Non-reactive with combustible materials.
Corrosivity	Not considered to be corrosive for metals and glass.
Special Remarks on Reactivity	Incompatible with chlorinated compounds. (2-Propanol)
Special Remarks on Corrosivity	Not available.

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-).
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). 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	CARCINOGENIC EFFECTS: Classified A5 (Not suspected for human.) by ACGIH, 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP, None. by OSHA [Methanol]. 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 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]. Classified 4 (Probably not for human.) by IARC, 4 (No evidence.) by NTP [Silica gel, pptd., cryst.-free]. 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]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Classified None. for human [2-Propanone]. DEVELOPMENTAL TOXICITY: 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.
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	Prolonged or repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea and central nervous system depression. High level exposure to Xylene in laboratory animals, often at levels which are toxic to the mother, have affected the development of the fetus. The relevance of this to humans is not known. (Benzene, dimethyl-)
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract. (Acetic acid, butyl ester)

Continued on Next Page

Exposure Limits**Acetic acid, butyl ester**

TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994]

Benzene, methyl-

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/m³) from NIOSH**Methanol**

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

TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [United States] [2000]

TWA: 200 STEL: 250 (ppm) from NIOSH [1997]

TWA: 260 STEL: 325 (mg/m³) from NIOSH**Benzene, dimethyl-**

TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) [United States] [1992]

TWA: 434 STEL: 651 (ppm) from ACGIH (TLV) [United States] [1992]

1-Propanol, 2-methyl-

TWA: 50 (ppb) from ACGIH (TLV) [United States] [1993]

2-Propanol

TWA: 400 STEL: 500 (ppb) from ACGIH (TLV) [United States] [1994]

TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994]

Acetic acid, 2-methylpropyl ester

TWA: 150 (ppb)

Benzene, ethyl-

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

TWA: 100 STEL: 125 (ppm) from ACGIH (TLV) [United States]

STEL: 545 (ppm) from NIOSH

STEL: 125 (ppm) from NIOSH

Potential additional emission of formaldehyde

TWA: 1 STEL: 2 (ppb) from ACGIH (TLV) [United States] [1989]

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

TWA: 5 (ppm)

Dibutyl phosphate

TWA: 1 CEIL: 2 (ppb)

TWA: 5 CEIL: 10 (ppm)

Silica gel, pptd., cryst.-freeTWA: 10 (mg/m³) from ACGIH (TLV) [United States] [2000]**2-Propanone**

TWA: 500 STEL: 750 (ppb) from ACGIH (TLV) [United States] [1997]

TWA: 1188 STEL: 1782 (ppm) from ACGIH (TLV) [United States] [1997]

Consult local authorities for acceptable exposure limits.

Section 7. Preventive Measures**Personal Protection**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill

Splash goggles. Full suit. Vapor respirator. Boots. A self contained breathing apparatus should be used to avoid inhalation of the product. Gloves (impervious).

Engineering Controls

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.

Small Spill

Absorb with an inert material and put the spilled material in an appropriate waste disposal.

Large Spill

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.

Waste Disposal

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Precautions

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, reducing agents, acids, alkalis.

Storage

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).

Continued on Next Page

TDG Classification	Class 3: Flammable liquid.	
PIN	1263 PAINT	PG: II
Special Provisions for Transport	Not available.	
Federal and State Regulations	<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-; Xylenes - mixed isomers; Benzene, ethyl-; Benzene, dimethyl-; 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>Illinois toxic substances disclosure to employee act: Benzene, ethyl-</p> <p>New York release reporting list: Benzene, methyl-; Methanol</p> <p>New York acutely hazardous substances: Benzene, ethyl-</p> <p>Rhode Island RTK hazardous substances: Methanol; Benzene, ethyl-</p> <p>Pennsylvania RTK: Methanol: (environmental hazard); Isopropyl alcohol; Isobutyl Acetate; Silica gel, pptd., cryst.-free</p> <p>Florida: Benzene, methyl-; Methanol; Benzene, ethyl-</p> <p>Minnesota: Benzene, methyl-; Methanol; Benzene, ethyl-; Silica gel, pptd., cryst.-free</p> <p>Michigan critical material: Benzene, methyl-</p> <p>Massachusetts RTK: Benzene, methyl-; Methanol; Isopropyl alcohol; Isobutyl Acetate; Benzene, ethyl-; Silica gel, pptd., cryst.-free</p> <p>New Jersey: Benzene, methyl-; Methanol; Isopropyl alcohol; Isobutyl Acetate; Benzene, ethyl-</p> <p>TSCA 8(b) inventory: Acetic acid, butyl ester; Benzene, methyl-; Xylenes - mixed isomers; Isopropyl alcohol; Isobutyl Acetate; Benzene, ethyl-; Benzene, dimethyl-; Formaldehyde; N-Butyl Alcohol</p> <p>TSCA 8(d) H and S data reporting: Benzene, methyl-: October 4, 1992; Benzene, ethyl-</p> <p>SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol; Formaldehyde; N-Butyl Alcohol</p> <p>SARA 302/304/311/312 hazardous chemicals: Methanol</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Xylenes - mixed isomers: fire, immediate health hazard; Isobutyl alcohol: fire, delayed health hazard; Benzene, ethyl-: fire, immediate health hazard; Benzene, dimethyl-: fire, immediate health hazard</p> <p>SARA 313 toxic chemical notification and release reporting: Benzene, methyl- 5.435%; Methyl Alcohol 14.68%; Xylenes - mixed isomers 17.93%; Isopropyl alcohol 5.405%; Benzene, dimethyl- 18.497%; 2-Propanone 6.42%</p> <p>CERCLA: Hazardous substances.: Acetic acid, butyl ester; Benzene, methyl-: 1000 lbs. (453.6 kg); Methyl Alcohol; Xylenes - mixed isomers; Isobutyl alcohol; Isobutyl Acetate; Benzene, ethyl-: 1000 lbs. (453.6 kg); Benzene, dimethyl-; N-Butyl Alcohol; 2-Propanone;</p>	
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
Other Classifications	WHMIS (Canada)	<p>CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).</p> <p>CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).</p> <p>CLASS D-2A: Material causing other toxic effects (VERY TOXIC).</p> <p>CLASS D-2B: Material causing other toxic effects (TOXIC).</p>
	HCS (U.S.A.)	<p>Class: Contains material which may cause cancer.</p> <p>Class: Flammable liquid having a flash point lower than 37.8°C (100°F).</p> <p>Class: Irritating substance.</p> <p>Class: Target organ effects.</p> <p>Class: Reproductive toxins.</p>
Hazardous Material Information System (U.S.A.)	Health Hazard	* 2
	Fire Hazard	3
	Reactivity	0
	Personal Protection	h
National Fire Protection Association (U.S.A.)	Health	2
	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 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 7/10/2002. Verified by C.M. Kelly. Printed 1/7/2003.
Information Contact	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.