

Material Safety Data Sheet

Validated by E. Stapleton on 6/26/2000.
Verified by E. Stapleton.
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Section 1. Product Identification and Use

Product Name - Trade Name **355-335 E.S. LACQUER**

Supplier - Manufacturer **Chemcraft International Inc.,**
3950 New Walkertown Rd.
Winston-Salem, NC.
U.S.A. 27051

Telephone (336) 723-1846 Fax (336) 724-7138

In case of Emergency 1-800-424-5571

For Transport Emergency or After Hours

CHEMTREC 1-800-424-9300

Code 355-335

Synonym E.S. LACQUER

Chemical Name Not applicable.

Chemical Family Synthetic polymer in organic solvent. (Polymer.)

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
Xylenes	1330-20-7	10-30	ORAL (LD50): Acute: 4300 mg/kg [Rat].	TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States] [1992] TWA: 434 STEL: 651 (ppm) from ACGIH (TLV) [United States] [1992]
1-Butanol	71-36-3	10-30	ORAL (LD50): Acute: 2510 mg/kg [Rat]. 790 mg/kg [Rat]. DERMAL (LD50): Acute: 5300 mg/kg [Rabbit]. 3400 mg/kg [Rabbit].	TWA: 50 CEIL: 50 (ppb)
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].	TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994]
Nitrocellulose	9004-70-0	5-10	Not available.	Not available.
Isopropanol	67-63-0	1-5	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]
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]
Ethyl 3-ethoxy propionate	763-69-9	5-10	ORAL (LD50): Acute: 5001 mg/kg [Rat]. 4301 mg/kg [Rat]. DERMAL (LD50): Acute: 10000 mg/kg [Rabbit].	Not available.

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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

Physical State and Appearance	Liquid.
Color	Not available.
Odor	Not available.
Taste	Not available.
Molecular Weight	Not applicable.
pH (1% soln/water)	Not applicable.
Boiling Point	The lowest known value is 82.5°C (180.5°F) (2-Propanol). Weighted average: 137.81°C (280.1°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: -81.11°C (-114°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.94 (Water = 1)
Vapor Pressure	The highest known value is 4.4 kPa (@ 20°C) (2-Propanol). Weighted average: 1.04 kPa (@ 20°C)
Vapor Density	The highest known value is 5.03 (Air = 1) (Propanoic Acid, 3-Ethoxy, Ethyl Ester). Weighted average: 3.52 (Air = 1)
Volatility	Not available.
Odor Threshold	The highest known value is 22 ppm (2-Propanol) Weighted average: 1.96 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. 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, 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.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back. (Benzene, dimethyl-)
Flash Points	The lowest known value is CLOSED CUP: 14°C (57.2°F). (Tagliabue.). (2-Propanol)
Flammable Limits	The greatest known range is LOWER: 2% UPPER: 12% (2-Propanol)
Auto-Ignition Temperature	The lowest known value is 343°C (649.4°F) (1-Butanol).
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.

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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, reducing agents, acids, alkalis. Slightly reactive to reactive with organic materials, metals. Non-reactive with moisture.
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	Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 790 mg/kg [Rat]. (1-Butanol). Acute dermal toxicity (LD50): 3400 mg/kg [Rabbit]. (1-Butanol).
Effects of Acute Exposure	Very hazardous in case of skin contact (irritant), of eye contact (irritant). Hazardous in case of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (corrosive, permeator). 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 [1-Butanol]. 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 [Phosphoric acid, monobutyl ester]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC, 2 (Some evidence.) by NTP [Potential additional emission of formaldehyde]. 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 [Propanoic Acid, 3-Ethoxy, Ethyl Ester]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [PROVEN] [Potential additional emission of formaldehyde]. The substance is toxic to blood, 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. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death. (Benzene, dimethyl-)
Exposure Limits	Benzene, dimethyl- TWA: 100 STEL: 150 (ppb) from ACGIH (TLV) [United States] [1992] TWA: 434 STEL: 651 (ppm) from ACGIH (TLV) [United States] [1992] 1-Butanol TWA: 50 CEIL: 50 (ppb) Acetic acid, butyl ester TWA: 150 STEL: 200 (ppb) from ACGIH (TLV) [United States] [1994] 2-Propanol TWA: 400 STEL: 500 (ppb) from ACGIH (TLV) [United States] [1994] TWA: 983 STEL: 1230 (ppm) from ACGIH (TLV) [United States] [1994] Dibutyl phosphate TWA: 1 CEIL: 2 (ppb)

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TWA: 5 CEIL: 10 (ppm)
1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich
 TWA: 5 (ppm)
Potential additional emission of formaldehyde
 TWA: 1 STEL: 2 (ppb) from ACGIH (TLV) [United States] [1989]
2-Butanol
 TWA: 150 (ppb)
 TWA: 450 (ppm)
Silica gel, pptd., cryst.-free
 TWA: 10 (ppm)

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. 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.
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).
TDG Classification	Class 3: Flammable liquid.
PIN	1263 PAINT PG: II
Special Provisions for Transport	Not available.
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: Xylenes - mixed isomers; Formaldehyde 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 Pennsylvania RTK: Isopropyl alcohol Massachusetts RTK: Isopropyl alcohol New Jersey: Isopropyl alcohol TSCA 8(b) inventory: Xylenes - mixed isomers; N-Butyl Alcohol; n-Butyl Acetate; Isopropyl alcohol; Formaldehyde SARA 302/304/311/312 extremely hazardous substances: N-Butyl Alcohol; Isopropyl alcohol; Formaldehyde SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Xylenes - mixed isomers: fire, immediate health hazard; Isobutyl alcohol: fire, delayed health hazard SARA 313 toxic chemical notification and release reporting: Xylenes - mixed isomers 25.68%; N-Butyl Alcohol 10.4113%; Isopropyl alcohol 4.5275%; 2-Butanol 0.1625% CERCLA: Hazardous substances.: Xylenes - mixed isomers; N-Butyl Alcohol; n-Butyl Acetate; Isobutyl alcohol;

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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.)	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 E. Stapleton on 6/26/2000. Verified by E. Stapleton.

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Information Contact

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