

Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **390-027 E.S. SEALER**

Supplier - Manufacturer **Chemcraft International Inc.,**
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Code 390-027
Synonym E.S. SEALER
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	123-86-4	15 - 30	ORAL (LD50): Acute: 14130 mg/kg [Rat]. 7100 mg/kg [Mouse]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit]. 8770 mg/kg [Guinea pig].	OSHA (United States). TWA: 150 ppm STEL: 200 ppm ACGIH (United States, 2000). TWA: 150 ppm STEL: 200 ppm NIOSH TWA: 150 ppm STEL: 200 ppm
Methyl alcohol	67-56-1	5 - 15	ORAL (LD50): Acute: 6200 mg/kg [Rat.]. 5600 mg/kg [Rat]. DERMAL (LD50): Acute: 15800 mg/kg [Rabbit.].	OSHA (United States). TWA: 200 ppm ACGIH (United States, 2000). TWA: 200 ppm STEL: 250 ppm NIOSH (1997). TWA: 200 ppm STEL: 250 ppm TWA: 260 mg/m ³ STEL: 325 mg/m ³
Xylenes	1330-20-7	5 - 15	ORAL (LD50): Acute: 4300 mg/kg [Rat.].	ACGIH (United States, 1992). TWA: 100 ppm STEL: 150 ppm TWA: 434 mg/m ³ STEL: 651 mg/m ³
Toluene	108-88-3	5 - 15	ORAL (LD50): Acute: 2600 mg/kg [Rat.]. DERMAL (LD50): Acute: 12210 mg/kg	ACGIH (United States, 1993). TWA: 50 ppm

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Isobutyl alcohol	78-83-1	5 - 15	[Rabbit]. ORAL (LD50): Acute: 2500 mg/kg [Rat]. 3200 mg/kg [Mouse]. DERMAL (LD50): Acute: 4200 mg/kg [Rabbit].	TWA: 188 mg/m ³ ACGIH (United States, 1993). TWA: 50 ppm
Ethyl Acetate	141-78-6	5 - 15	ORAL (LD50): Acute: 5620 mg/kg [Rat]. 4100 mg/kg [Mouse]. 4935 mg/kg [Rabbit]. DERMAL (LD50): Acute: >20 mg/kg [Rabbit].	ACGIH TLV (United States) TWA: 400 ppm 8 hour/hours. ACGIH (United States). TWA: 400 ppm ACGIH (United States, 1994). TWA: 400 ppm STEL: 500 ppm TWA: 983 mg/m ³ STEL: 1230 mg/m ³
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].	ACGIH (United States, 1994). TWA: 400 ppm STEL: 500 ppm TWA: 983 mg/m ³ STEL: 1230 mg/m ³
Ethylbenzene	100-41-4	1 - 5	ORAL (LD50): Acute: 3500 mg/kg [Rat]. DERMAL (LD50): Acute: 5000 mg/kg [Rabbit].	ACGIH (United States). TWA: 100 ppm STEL: 125 ppm NIOSH STEL: 125 ppm
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].	OSHA (United States). STEL: 2 ppm 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

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 64.5°C (148.1°F) (Methanol). Weighted average: 113.13°C (235.6°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: -88.01°C (-126.4°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.91 (Water = 1)
Vapor Pressure	The highest known value is 12.2 kPa (91.8 mm Hg) (at 20°C) (Methanol). Weighted average: 5.23 kPa (39.23 mm Hg) (at 20°C)
Vapor Density	The highest known value is 4 (Air = 1) (1,2-Benzenedicarboxylic acid, di-C(8-10)-branched alkyl esters, C9-rich). Weighted average: 2.93 (Air = 1)
Volatility	Not available.
Odor Threshold	The lowest known value is 0.04 ppm (Acetic Acid, Butyl Ester) Weighted average: 2.72 ppm
Water/Oil Dist. Coeff.	The product is much more soluble in octanol.
Ionicity (in Water)	Not available.
Dispersion Properties	Partially dispersible in methanol, diethyl ether. Not dispersible in cold water, hot water. See solubility in methanol, diethyl ether, n-octanol, acetone.
Solubility	Easily soluble in methanol, diethyl ether, acetone. Soluble in n-octanol. Insoluble in cold water, hot water.

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Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. Highly flammable in the presence of the following materials or conditions: heat. Non-flammable in the presence of the following materials or conditions: oxidizing materials, reducing materials, combustible materials and moisture.
Fire Fighting Media and Instructions	SMALL FIRE: Use dry chemical powder. LARGE FIRE: Use water spray or fog. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.
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: -1°C (30.2°F). (Tagliabue). Open cup: -0.5°C (31.1°F). (Tagliabue). (Acetic Acid, Ethyl Ester)
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 the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
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 or incompatible with the following materials: oxidizing materials. Reactive or incompatible with the following materials: reducing materials, organic materials, metals, acids and alkalis. Non-reactive or compatible with the following materials: moisture.
Corrosivity	Not available.
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): >20 mg/kg [Rabbit]. (Acetic Acid, Ethyl Ester). Acute toxicity of the gas (LC50): 45000 mg/m ³ 2 hour/hours [Mouse]. (Acetic Acid, Ethyl Ester). Acute toxicity of the vapor (LC50): 16000 ppm 6 hour/hours [Rat]. (Acetic Acid, Ethyl Ester).
Effects of Acute Exposure	Very hazardous in case of ingestion. Hazardous in case of skin contact (permeator), of inhalation. Slightly hazardous in case of skin contact (corrosive). Severe over-exposure can result in death.
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [Methanol]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC [Acetic Acid, Ethyl Ester]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC, None. by OSHA [2-Propanol]. Classified 4 (Probably not for humans.) by IARC [Silica gel, pptd., cryst.-free]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC [Phosphoric acid, monobutyl ester]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde]. MUTAGENIC EFFECTS: Not available.

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	TERATOGENIC EFFECTS: Not available.
	DEVELOPMENTAL TOXICITY: Not available.
	The substance is toxic to blood, the nervous system, liver.
	Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
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, Butyl Ester)
Exposure Limits	Not available.

Section 7. Preventive Measures

Personal Protection	Safety glasses. 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. Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product. Suggested protective clothing might not be adequate. 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 occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
Small Spill	Absorb with an inert material and transfer the spilled material and absorbent to an appropriate waste disposal container.
Large Spill	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 allow water to enter container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas. Dike if necessary. Call for assistance on disposal.
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	3
PIN	1263 PAINT PG: II
Special Provisions for Transport	-
Federal and State Regulations	WARNING: This product contains chemical/chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.: Benzene; Benzene, methyl-; Formaldehyde WARNING: This product contains chemical/chemicals known to the state of California to cause reproductive harm (male): Benzene WARNING: This product contains chemical/chemicals known to the state of California to cause birth defects or other reproductive harm.: Benzene; Benzene, methyl- WARNING: This product contains chemical/chemicals known to the state of California to cause cancer.: Benzene; Formaldehyde Illinois toxic substances disclosure to employee act: Benzene, ethyl- New York release reporting list: Methanol; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester New York acutely hazardous substances: Benzene, ethyl- Rhode Island RTK hazardous substances: Methanol; Benzene, ethyl-; Acetic Acid, Ethyl Ester

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Pennsylvania RTK: Benzene, methyl-; Methanol: (environmental hazard); Benzene, ethyl-; Benzene, dimethyl-; Isopropyl alcohol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester
 Florida: Methanol; Benzene, ethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
 Minnesota: Methanol; Benzene, ethyl-; Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
 Massachusetts RTK: Methanol; Benzene, ethyl-; Isopropyl alcohol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester
 New Jersey: Benzene, methyl-; Methanol; Benzene, ethyl-; Isopropyl alcohol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; Acetic Acid, Ethyl Ester
 TSCA 8(b) inventory: Benzene, methyl-; Benzene, ethyl-; Benzene, dimethyl-; Isopropyl alcohol; Acetic Acid, Butyl Ester; Acetic acid, 2-methylpropyl ester; N-Butyl Alcohol; Superslip 6530; Acetic Acid, Ethyl Ester
 TSCA 5(e) substance consent order: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
 TSCA 8(d) H and S data reporting: Benzene, ethyl-
 TSCA 12(b) annual export notification: Acetic Acid, Butyl Ester; Acetic Acid, Ethyl Ester
 SARA 302/304/311/312 extremely hazardous substances: Isopropyl alcohol
 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, Butyl Ester; Acetic Acid, Ethyl Ester: Fire hazard, Immediate (acute) health hazard
 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, Butyl Ester; Acetic acid, 2-methylpropyl ester; N-Butyl Alcohol; Acetic Acid, Ethyl Ester;

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

OSHA: Standard for Occupational Exposure to Formaldehyde 29CFR 1910.1048 must be consulted before initial use of product

Other Classifications

WHMIS (Canada) **Class B-2: Flammable liquid**
 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.) Contains material which may cause cancer
 Highly toxic
 Target organ effects

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

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.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly 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 if symptoms appear.
Hazardous Inhalation	Move 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. Seek medical attention.
Ingestion	Do not induce vomiting. Examine the lips and mouth to ascertain if the tissues are damaged, a possible indication that 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 A. Davis on 12/22/2005. Verified by A. Davis. Printed 10/24/2006.
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

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