

Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **873-0870 CATALYST**

Supplier - Manufacturer **Chemcraft International Inc.,**
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Code 873-0870

Synonym CATALYST

Chemical Name Not applicable.

Chemical Family Acid. (Paint.)

Chemical Formula Not applicable.

Material Uses Coatings: Surface coatings and finishes.

Product Identification Number (PIN) 2924 FLAMMABLE LIQUIDS, CORROSIVE, N.O.S. (ethyl acetate, toluene sulphonic acid)

Section 2. Hazardous Ingredients

Exposure limits

Name	CAS #	% by Weight	LC ₅₀ /LD ₅₀	TLV/PEL
Ethyl alcohol	64-17-5	50 - 70	ORAL (LD50): Acute: 7060 mg/kg [Rat]. VAPOR (LC50): Acute: 8000 mg/l 4 hour/hours [Rat].	OSHA (United States). TWA: 1000 ppm ACGIH (United States). TWA: 1000 ppm NIOSH TWA: 1000 ppm
Ethyl Acetate	141-78-6	15 - 30	ORAL (LD50): Acute: 5620 mg/kg [Rat]. 4100 mg/kg [Mouse]. 4935 mg/kg [Rabbit].	ACGIH TLV (United States) . TWA: 400 ppm 8 hour/hours. TWA: 400 ppm
Anhydrous para-toluenesulfonic acid	104-15-4	15 - 30	ORAL (LD50): Acute: 2480 mg/kg [Rat].	
Phosphoric acid	7664-38-2	1 - 5	ORAL (LD50): Acute: 1530 mg/kg [Rat]. DERMAL (LD50): Acute: 2740 mg/kg [Rabbit].	

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.

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Boiling Point	The lowest known value is 77°C (170.6°F) (Acetic Acid, Ethyl Ester). Weighted average: 78.63°C (173.5°F)
Melting Point	May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -101.57°C (-150.8°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.9 (Water = 1)
Vapor Pressure	The highest known value is 9.7 kPa (73 mm Hg) (at 20°C) (Acetic Acid, Ethyl Ester). Weighted average: 6.84 kPa (51.3 mm Hg) (at 20°C)
Vapor Density	The highest known value is 3.04 (Air = 1) (Acetic Acid, Ethyl Ester). Weighted average: 2.02 (Air = 1)
Volatility	Not available.
Odor Threshold	The lowest known value is 180 ppm (Ethanol)
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	Partially dispersible in methanol, diethyl ether. See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol, diethyl ether. Insoluble in n-octanol.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Slightly flammable in the presence of the following materials or conditions: oxidizing materials. Non-flammable in the presence of the following materials or conditions: shocks and mechanical impacts, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Fire Fighting Media and Instructions	SMALL FIRE: Use dry chemical powder. LARGE FIRE: Use alcohol-resistant foam or 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	Containers should be grounded. (Ethanol)
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: 3.3% Upper: 19% (Ethanol)
Auto-Ignition Temperature	The lowest known value is 422°C (791.6°F) (Ethanol).
Products of Combustion	These products are carbon oxides (CO, CO ₂), sulfur oxides (SO ₂ , SO ₃ etc.), phosphates.
Explosion Hazards in Presence of Various Substances	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.
Special Remarks on Explosion Hazards	Not available.

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Extremely reactive or incompatible with the following materials: alkalis. Reactive or incompatible with the following materials: oxidizing materials and organic materials. Non-reactive or compatible with the following materials: moisture.
Corrosivity	Not available.
Special Remarks on Reactivity	Incompatible with finely powdered metals. (Phosphoric acid)

Special Remarks on Corrosivity Corrosive to ferrous metals and alloys. (Phosphoric acid)

Section 6. Toxicological Properties

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 1530 mg/kg [Rat.]. (Phosphoric acid). Acute dermal toxicity (LD50): 2740 mg/kg [Rabbit.]. (Phosphoric acid). 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 skin contact (corrosive). Hazardous in case of ingestion. Slightly hazardous in case of inhalation. Liquid, spray or mist may produce tissue damage, particularly to mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray or mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [Ethanol]. Classified A5 (Not suspected for humans.) by ACGIH, 4 (Probably not for humans.) by IARC [Acetic Acid, Ethyl Ester]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: PROVEN [Ethanol] The substance is toxic to the reproductive system. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation, leading to frequent attacks of bronchial infection.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Moderately toxic and narcotic in high concentrations. Experimentally tumorigen. (Ethanol)
Exposure Limits	Not available.

Section 7. Preventive Measures

Personal Protection	Splash goggles. Synthetic apron. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Impervious 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	Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in 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 curtain to divert vapor drift. 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 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. 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.

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	2924 FLAMMABLE PG: II LIQUIDS,CORROSIVE, N.O.S.(ethyl acetate, toluene sulphonic acid)	
Special Provisions for Transport	-	
Federal and State Regulations	New York release reporting list: Acetic Acid, Ethyl Ester Rhode Island RTK hazardous substances: Acetic Acid, Ethyl Ester Pennsylvania RTK: Acetic Acid, Ethyl Ester; Ethanol Florida: Acetic Acid, Ethyl Ester Minnesota: Acetic Acid, Ethyl Ester; Ethanol Massachusetts RTK: Acetic Acid, Ethyl Ester; Ethanol New Jersey: Acetic Acid, Ethyl Ester; Ethanol TSCA 8(b) inventory: Acetic Acid, Ethyl Ester; Ethanol TSCA 5(e) substance consent order: Acetic Acid, Ethyl Ester TSCA 12(b) annual export notification: Acetic Acid, Ethyl Ester SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Acetic Acid, Ethyl Ester: Fire hazard, Immediate (acute) health hazard CERCLA: Hazardous substances.: Acetic Acid, Ethyl Ester;	
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
Other Classifications	WHMIS (Canada)	Class B-2: Flammable liquid Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic). Class E: Corrosive material
	HCS (U.S.A.)	Contains material which may cause cancer Toxic Target organ effects
Hazardous Material Information System (U.S.A.)	Health Hazard	* 3
	Fire Hazard	3
	Reactivity	0
	Personal Protection	H
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. Cold water may be used. Get medical attention.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
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. 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 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 S.Bice on 2/21/2006.**

Verified by S.Bice.

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