

# Material Safety Data Sheet

## Section 1. Product Identification and Use

Product Name - Trade Name **999-017 CATALYST [CA 07266]**

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 999-017

Synonym CATALYST [CA 07266]

Chemical Name Not applicable.

Chemical Family Acid. (Acid.)

Chemical Formula Not applicable.

Material Uses Coatings: Surface coatings and finishes.

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

## Section 2. Hazardous Ingredients

### Exposure limits

Name	CAS #	% by Weight	LC <sub>50</sub> /LD <sub>50</sub>	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].	<b>OSHA (United States).</b> TWA: 1000 ppm <b>ACGIH (United States).</b> TWA: 1000 ppm <b>NIOSH</b> 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]. DERMAL (LD50): Acute: >20 mg/kg [Rabbit].	<b>ACGIH TLV (United States)</b> . TWA: 400 ppm 8 hour/hours. <b>ACGIH (United States).</b> TWA: 400 ppm
Anhydrous para-toluenesulfonic acid	104-15-4	15 - 30	ORAL (LD50): Acute: 2480 mg/kg [Rat].	

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) Acidic.

Boiling Point The lowest known value is 77°C (170.6°F) (Acetic Acid, Ethyl Ester). Weighted average: 78.55°C (173.4°F)

Continued on Next Page

<b>Melting Point</b>	May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -101.25°C (-150.2°F)
<b>Critical Temperature</b>	Not available.
<b>Specific Gravity</b>	Weighted average: 0.89 (Water = 1)
<b>Vapor Pressure</b>	The highest known value is 9.7 kPa (73 mm Hg) (at 20°C) (Acetic Acid, Ethyl Ester). Weighted average: 6.93 kPa (51.98 mm Hg) (at 20°C)
<b>Vapor Density</b>	The highest known value is 3.04 (Air = 1) (Acetic Acid, Ethyl Ester). Weighted average: 2.05 (Air = 1)
<b>Volatility</b>	Not available.
<b>Odor Threshold</b>	The lowest known value is 180 ppm (Ethanol)
<b>Water/Oil Dist. Coeff.</b>	The product is much more soluble in water.
<b>Ionicity (in Water)</b>	Not available.
<b>Dispersion Properties</b>	Partially dispersible in methanol, diethyl ether. See solubility in water, methanol, diethyl ether.
<b>Solubility</b>	Easily soluble in cold water, hot water, methanol, diethyl ether. Insoluble in n-octanol.

## Section 4. Fire and Explosion Hazard

<b>The Product is:</b>	Flammable.
<b>Fire Hazards in Presence of Various Substances</b>	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.
<b>Fire Fighting Media and Instructions</b>	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.
<b>Special Remarks on Fire Hazards</b>	Containers should be grounded. (Ethanol)
<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: 3.3% Upper: 19% (Ethanol)
<b>Auto-Ignition Temperature</b>	The lowest known value is 422°C (791.6°F) (Ethanol).
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), sulfur oxides (SO <sub>2</sub> , SO <sub>3</sub> etc.).
<b>Explosion Hazards in Presence of Various Substances</b>	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.
<b>Special Remarks on Explosion Hazards</b>	Not available.

## Section 5. Reactivity Data

<b>Stability</b>	The product is stable.
<b>Decomposition products</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Reactive or incompatible with the following materials: oxidizing materials. Non-reactive or compatible with the following materials: moisture.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Not available.
<b>Special Remarks on Corrosivity</b>	Not available.

Continued on Next Page

## Section 6. Toxicological Properties

Routes of Entry	Dermal contact. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 2480 mg/kg [Rat]. (Benzenesulfonic acid, 4-methyl-). Acute dermal toxicity (LD50): >20 mg/kg [Rabbit]. (Acetic Acid, Ethyl Ester). Acute toxicity of the gas (LC50): 45000 mg/m <sup>3</sup> 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 eye contact (irritant), 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. Severe over-exposure can result in death.
Chronic Effects on Humans	<b>CARCINOGENIC EFFECTS:</b> 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]. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> 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. 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	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	Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.
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. If necessary: <b>Neutralize the residue with a dilute solution of sodium carbonate.</b>
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. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas. Dike if necessary. Call for assistance on disposal. <b>Neutralize the residue with a dilute solution of sodium carbonate.</b>
Waste Disposal	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. 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.	
<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>	2924 FLAMMABLE <b>PG:</b> III LIQUID, CORROSIVE N.O.S. (ethyl acetate, sulphonic acid)	
<b>Special Provisions for Transport</b>	-	
<b>Federal and State Regulations</b>	New York release reporting list: Acetic Acid, Ethyl Ester Rhode Island RTK hazardous substances: Acetic Acid, Ethyl Ester Pennsylvania RTK: Ethanol; Acetic Acid, Ethyl Ester Florida: Acetic Acid, Ethyl Ester Minnesota: Ethanol; Acetic Acid, Ethyl Ester Massachusetts RTK: Ethanol; Acetic Acid, Ethyl Ester New Jersey: Ethanol; Acetic Acid, Ethyl Ester TSCA 8(b) inventory: Ethanol; Acetic Acid, Ethyl Ester 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;	
<b>Other Regulations</b>	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).	
<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	<b>Class B-2: Flammable liquid</b> <b>Class D-2A: Material causing other toxic effects (Very toxic).</b> <b>Class D-2B: Material causing other toxic effects (Toxic).</b> <b>Class E: Corrosive material</b>
	<b>HCS (U.S.A.)</b>	Contains material which may cause cancer Highly toxic Target organ effects
<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health Hazard</b>	* 3
	<b>Fire Hazard</b>	3
	<b>Reactivity</b>	0
	<b>Personal Protection</b>	
<b>National Fire Protection Association (U.S.A.)</b>	<b>Health</b>	4
	<b>Fire Hazard</b>	0
	<b>Reactivity</b>	0
	<b>Specific Hazard</b>	

## Section 8. First Aid Measures

<b>Eye Contact</b>	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 if irritation occurs.
<b>Skin Contact</b>	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. Cold water may be used. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Continued on Next Page

<b>Hazardous Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.
<b>Hazardous Inhalation</b>	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.
<b>Ingestion</b>	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.
<b>Hazardous Ingestion</b>	Not available.

## **Section 9. Preparation Information**

<b>References</b>	-Manufacturers Material Safety Data Sheets.
<b>Other Special Considerations</b>	Not available.
<b>Related Information</b>	This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.
<b>Preparation Information</b>	<b>Validated by A. Davis on 12/29/2005.</b> <b>Verified by A. Davis.</b> <b>Printed 1/12/2006.</b>
<b>Information Contact</b>	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**

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