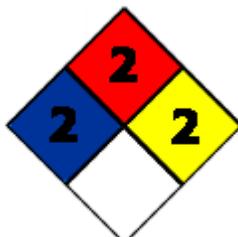


MATERIAL SAFETY DATA SHEET

NFPA	HMIS	Personal Protective Equipment
------	------	-------------------------------



Health Hazard	2
Fire Hazard	2
Reactivity	1



See Section 8.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code:	E2875
Product Name:	ETHYL 2-CYANOACRYLATE
Chemical Name:	2-Propenoic acid, 2-cyano-, ethyl ester
Synonyms:	Acrylic acid, 2-cyano-, ethyl ester 2-Cyanoacrylic acid ethyl ester Cyanon S Ethyl cyanoacrylate Ethyl alpha-cyanoacrylate Ethyl 2-cyano-2-propenoate Super Glue
Recommended use:	Adhesives.
CAS #:	7085-85-0
Formula:	C6-H7-N-O2
RTECS #	UD3330050
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW			
WARNING! COMBUSTIBLE LIQUID. WARNING! IRRITANT. Irritating to skin. Irritating to eyes. Irritating to respiratory system. May cause allergic skin reaction. May cause contact dermatitis.			
Odor: Strong. Acrid.	Physical state: Liquid.	Appearance: No information available	Color: Clear. Colorless.

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:

Skin. Eyes. Inhalation. Ingestion.

Acute Potential Health Effects:**Skin Contact:**

Irritating to skin. May cause allergic skin reaction. It may cause contact dermatitis.

Eye Contact:

Causes eye irritation.

Inhalation:

Irritating to respiratory system.

Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhoea. May cause central nervous system effects.

Chronic Potential Health Effects:**Component**

Ethyl 2-Cyanoacrylate
7085-85-0 (100)

Carcinogen Status:

No information available

Target Organs:

No information available

Teratogenic Effects:

No information available

Mutagenic Effects:

No information available

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Ethyl 2-Cyanoacrylate	7085-85-0	100

4. FIRST AID MEASURES

General Advice:

Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Get medical attention.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
Notes to Physician:	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	82.78-85°C/181-185°F
----------------------------	----------------------

Tested according to: Closed cup

Lower Explosion Limit (%):	No information available
Upper Explosion Limit (%):	No information available

Autoignition Temperature (°C/°F):	Not applicable.
--	-----------------

Suitable Extinguishing Media:	Dry chemical. Carbon dioxide (CO ₂). Foam.
Unsuitable Extinguishing Media:	Water.
Hazardous Combustion Products:	Carbon monoxide; Carbon dioxide; Nitrogen oxides
Specific hazards:	Combustible material. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated.
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
Specific Methods:	Do not use water on material itself. Do not get water inside containers.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Remove all sources of ignition.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Cleaning Up:

Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Storage

Technical Measures/Storage Conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep refrigerated. Keep at temperatures between 2 and 8 °C. Protect from light. Sensitive to light. Store in light-resistant containers. Moisture sensitive. Protect from moisture. Store in a segregated and approved area. Store away from incompatible materials.

Incompatible Products:

Oxidizing agents. Alkali Metals. Alcohols. Amines. Water. Reducing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal Protective Equipment

Eye protection: Goggles.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent. .

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Ethyl 2-Cyanoacrylate - 7085-85-0	None	None	0.2 ppm TWA	None

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Ethyl 2-Cyanoacrylate 7085-85-0	0.2 ppm TWA 1 mg/m ³ TWA	0.2 ppm TWA	0.2 ppm TWA	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Ethyl 2-Cyanoacrylate 7085-85-0	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Liquid.

Appearance:

No information available

Color:

Clear. Colorless.

Odor:

Strong. Acrid.

Taste

No information available

Molecular/Formula weight:

125.13

Flash point (°C):

82.78

Lower Explosion Limit (%):

Not applicable

Upper Explosion Limit (%):

Not applicable

Autoignition Temperature (°C/°F):

No information available

pH:

No information available

Melting point/range(°C/°F):

-20 to -25 °C/-4 to -13 °F

Boiling point/range(°C/°F):

54-56 °C/129-133 °F

Decomposition temperature(°C/°F):

No information available

Specific gravity:

1.040 @ 20 °C

Density (g/cm³):

1.040

Bulk density:

No information available

Vapor pressure @ 20°C (kPa):

0.0413

Evaporation rate:

No information available

Vapor density:

No information available

VOC content (g/L):

No information available

Odor threshold (ppm):

No information available

Partition coefficient

(n-octanol/water):

1.42

Miscibility:

No information available

Solubility:

Reacts with water

10. STABILITY AND REACTIVITY

Stability:

Stable at normal conditions

Conditions to avoid:

Heat. Ignition sources. Exposure to light. Exposure to moist air. Exposure to moisture. Exposure to water. Incompatible materials.

Materials to avoid:

water. Amines. Alkali metals. Alcohols. Oxidising agents. Reducing agents.

Hazardous decomposition products:

Carbon monoxide. Carbon dioxide. Nitrogen oxides (NOx). Hydrogen cyanide (hydrocyanic acid). Formaldehyde.

Possibility of Hazardous Reactions: Reacts with water.

Polymerization: Polymerizes in water.

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Ethyl 2-Cyanoacrylate - 7085-85-0

LD50/oral/rat = > 5 mL/kg or > 5000 mg/kg Oral LD50 Rat

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information =
No information available

Product Information

LC50/inhalation/rat = No information available

LC50/Inhalation/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LD50/oral/mouse = No information available

LD50/oral/rat = > 5 mL/kg or > 5000 mg/kg

Local Effects

Skin irritation: Causes skin irritation. May cause contact dermatitis.

Eye irritation: Causes eye irritation. Causes lacrimation.

Inhalation: Irritating to respiratory system. Symptoms may include coughing and wheezing. Can cause dyspnea (shortness of breath and difficulty breathing). May cause asthmatic responses.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May affect behavior/central nervous system (convulsions). May affect behavior/central nervous system (somnolence).

Sensitization: May cause sensitization by skin contact

Chronic Toxicity

Chronic Toxicity No information available

Carcinogenic effects: Not considered carcinogenic

Components	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Ethyl 2-Cyanoacrylate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects: No information available

Reproductive Effects: No information available

Teratogenic Effects: No information available

Target Organs: No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available

Ecotoxicity effects: No data available.

Aquatic toxicity: No information available

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethyl 2-Cyanoacrylate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: No information available
DOT RQ (lbs): No information available

TDG (Canada)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available

Description: No information available

ADR

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant No information available
MFAG: No information available
Maximum Quantity: No information available

RID

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Packing Group: No information available
Subsidiary Risk: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Ethyl 2-Cyanoacrylate</i>	Present	Present	KE-09116	2-2789	Present	Present	230-391-5

U.S. Regulations

Ethyl 2-Cyanoacrylate

New Jersey RTK Hazardous Substance List: Present

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Ethyl 2-Cyanoacrylate	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Ethyl 2-Cyanoacrylate	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Ethyl 2-Cyanoacrylate	Not Applicable	01/26/1994 12/19/1995

Canada

WHMIS hazard class:

B3 Combustible liquid

Ethyl 2-Cyanoacrylate

B3

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Ethyl 2-Cyanoacrylate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Ethyl 2-Cyanoacrylate	Not listed	Not listed

EU Classification

R-phrases

R-phrases

R36/37/38 - Irritating to eyes, respiratory system and skin.

Product code: E2875

Product name: ETHYL 2-CYANOACRYLATE

9 / 10

S -phrase(s)

S 2 - Keep out of the reach of children.

S23 - Do not breathe gas/fumes/vapor/spray.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S24/25 - Avoid contact with skin and eyes.

Components	Classification	Safety Phrases
Ethyl 2-Cyanoacrylate	Xi; R36/37/38	S2 S23 S24/25 S26

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.

Xi

**16. OTHER INFORMATION**

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date	20-Apr-2012
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.