

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	H315 Causes skin irritation	Category 2
Serious eye irritation	H319 Causes serious eye irritation	Category 2
Specific target organ toxicity-single exposure	H335 May cause respiratory irritation	Category 3

Label elements:

Hazard pictogram:



Single word:

Warning

Emergency Overview:

Causes skin irritation

Causes serious eye irritation May cause respiratory irritation

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the

reach of children.

Precautionary Statement -

Avoid breathing dust/fumes/gas/mist/vapors/spray

Prevention

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statement - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do so. Continue rinsing. If eye irritation

persists get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

Precautionary Statement -

Storage

Store locked up.

Precautionary Statement –

Dispose of contents/container to an approved waste disposal plant.

Disposal

Other hazards:

None if used properly.



3. COMPOSITION / INFORMATION ON INGREDIENTS

General chemical description:

Cyanoacrylate Adhesive

Base substances of preparation:

Cyanoacrylate

Chemical Name	CAS-No	EINECS Number Index Number REACH-Reg No.	Weight - %
Ethyl-2-cyanoacrylate	7085-85-0	230-391-5 607-236-00-9 01-2119527766-29-0002	>70-<100% *

^{*} The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

Description of first aid measures

General advice

Avoid breathing gas/fumes/vapor/spray.

Inhalation:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. If symptoms persist, call a physician.

Skin contact:

IF ON SKIN: Wash with soap and water. Allow warm water to penetrate the bond and

gently attempt to remove bonded areas without pulling the skin away from bonded area.

If skin irritation persists, call a physician.

Eye contact:

IF IN EYES: Rinse immediately with plenty of water for several minutes. Remove

contact lenses, if present and easy to do so. Continue rinsing. Get medical

advice/attention.

Ingestion:

Not an expected route of exposure.

Ensure that breathing passages are not obstructed. The product will polymerize

immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth.

Self-protection of the first

aider:

Use personal protective equipment as required.

Most important symptoms and effect, both acute and delayed

May cause allergic or asthma symptoms or breathing difficulties if inhaled.

Eye:

Irritation, conjunctivitis.

Skin:

Redness, inflammation.

Respiratory

Irritation, coughing, shortness of breath, chest tightness.

Indication of any immediate medical attention and special treatment needed

In the case of lung irritation: Primary treatment using corticoide spray, e.g. Auxiloson spray, Pulmicort-dosage-spray, (Auxiloson and Pulmicort are registered trademarks.)

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Alcohol-resistant foam, dry powder, carbon dioxide, water spray jet

Unsuitable extinguishing media:

High volume water jet.

Special hazards arising from the substance or mixture

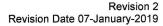
In the event of fire, the following can be released: Nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO₂).

Advice for firefighters

In case of fire and/or exposure do not breathe fumes. Firefighters should wear positive pressure self-contained breathing apparatus (SCBA). Firefighting operations, rescue and cleaning work under effect of combustion and smolder gases may be done with breathing apparatus. Dispose of contaminated extinction water according to official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures





For non-emergency personnel:

Use personal protective clothing.

For emergency responders:

Ensure adequate ventilation. Avoid contact with eyes or skin.

Environmental precautions

If leakage occurs, dam up. Resolve leaks, if possible, without risk. Prevent surface and ground-water infiltration, as well as ground penetration. Prevent from entering drainage system. If accidental entry into drainage system occurs, inform responsible authorities.

Methods and material for containment and cleaning up

Do not use cloth for clean-up. Flood with water to complete polymerization and scrape up the polymer. Solid material can be disposed as non-hazardous waste.

Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mists. Wash thoroughly after handling. Avoid contact with fabric and paper goods. Contact with these may cause polymerization that can generate smoke and strong irritating vapors and can cause thermal burns.

Advice on general occupational

Wash hands and face before eating.

hygiene:

Conditions for safe storage, including and incompatibilities

Keep in a cool, well-ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready to use. Incompatible products: Do not store together with alkalis.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Chemical Name	ACGIH TLV	OSHA PEL	EH40 WEL
Ethyl-2-cyanoacrylate 7085-85-0	0.2ppm TWA		0.3 ppm, 1.5 mg/m ³ STEL (15 min)

Exposure controls

Appropriate Engineering Controls:

If general ventilation is insufficient to maintain vapor concentration below established exposure limits, use protective downdraft exhaust ventilation. Keep away from food stuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end

Individual protection measures General protective and hygienic

of work. Avoid contact with eyes and skin.

measures

Safety glasses with side shields or chemical splash goggles.

Eye/Face protection

Do not use PVC, rubber, cotton or nylon gloves.

Skin protection Hand protection

Tested protective gloves are to be worn: Suitable material: Synthetic rubber gloves. For special applications, it is recommended to check the chemical

resistance with the glove manufacturer.

Respiratory protection

If there is a potential to exceed exposure limits, use an approved respirator.

Environmental exposure controls

Do not empty into drains or the aquatic environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state:

Liquid

Appearance:

Colorless to straw color

Odor:

Sharp, irritating

Odor threshold

Not available.



pH:

Not applicable.

Melting point/freezing point:

-22°C

Initial boiling point and boiling range:

>200°C

Flash point

80-93.4°C (Method: Tag closed cup)

Evaporation rate (Butyl acetate = 1):

Not available.

Flammability:

Not available.

Upper flammability limit:

Not available.

Lower flammability limit:

Not available.

Vapor Pressure (25°C):

Less than 0.2 mmHg

Vapor Density (Air=1):

Approximately 3

Relative Density:

1.1g/cm³

Solubility:

Polymerizes in the presence of water.

Partition coefficient:

Not applicable.

Auto-ignition temperature:

485°C

Decomposition temperature:

Not applicable.

Viscosity

1500-2500 cps.

Explosive properties:

Product is not explosive.

Oxidizing properties:

Product is not oxidizing.

Other information

Specific gravity:

1.10 (25°C)

VOC content:

Less than 2%; 20g/l (California SCAQMD Method 361B)

10. STABILITY AND REACTIVITY

Reactivity

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis, oxidizing agents, alcohols.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Danger of polymerization. Polymerization with evolution of heat.

Conditions to avoid

Spontaneous polymerizations.

Incompatible materials

Water, amines, alkalis, oxidizing agents and alcohols.

Hazardous decomposition products

Carbon monoxide and carbon dioxide. Nitrous oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

May cause irritation of respiratory tract

Eye contact

Contact with eyes may cause irritation. May cause redness and tearing of the eyes.

Skin contact

Irritating to the skin. Bonds skin in seconds.

Ingestion

It is almost impossible to swallow as it rapidly polymerizes in the mouth.

Acute toxicity:

				_
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50	
CAS-No	Oldi EDOO	Dominar EDGG	mindiation Eco	



Ethyl-2-cyanoacrylate >5000mg/kg (Rat) >2000mg/kg (Rabbit) ----

Information on toxicological effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

According to NTP, OSHA and IARC, the substance is not carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Biological and chemical oxygen demands (BOD and COD) are insignificant. Do not empty into drains/ surface water/ ground water. Do not allow uncontrolled leakage of product into the environment.

Persistence and degradability:

No information available.

Bioaccumulative potential:

No information available.

Mobility in soil:

Cured adhesives are immobile.

Results of PBT and vPvB Assessment:

PBT: Not applicable. vPvB: Not applicable.

Other adverse effects:

No further relevant information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and

local laws and regulations.

Contaminated packaging

Do not reuse container.

US EPA Waste Number

Not applicable

Special precautions:

Not available.

14. TRANSPORT INFORMATION

DOT

Proper shipping name

Not regulated

IATA

Proper shipping name

Aviation Regulated Liquid, N.O.S. (Cyanoacrylate Ester)

UN/ID No.:

UN 3334

Hazardous Class:

9

Packaging Group:

None

IMGD

Proper shipping name

Not regulated

15. REGULATORY INFORMATION

United State Regulatory Information:

TSCA 8 (b) Inventory Status:

All components are listed or are exempt from listing on the Toxic Substances

Control Act.

TSCA 12 (b) Export

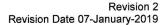
None above the reporting de minimis.

Notifications:

CERCLA/SARA Section 302

None above the reporting de minimis.

EHS:





CERCLA/SARA Section

311/312:

CERCLA/SARA Section 313:

Immediate Health, Delayed Health, Fire, Reactive

This product contains the following toxic chemicals subject to the reporting

requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Beta-Methoxyethyl Cyanoacrylate (CAS#

27816-23-5).

California Proposition 65:

No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status:

Contains one or more components listed on the Non-Domestic Substances List. All other components are listed or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

NFPA

Health hazards 2

Flammability 2

Instability 1

HMIS

Health hazards 2

Flammability 2

Physical hazards 1

Personal protection B

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

Further information

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties. Substances have been classified in accordance with Regulation (EC) 1272/2008 (CLP).