SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-DA-00061
Product Name	Ethyl vinyl ether
CAS No.	109-92-2
Category	Fine Chemicals
Synonyms	1-Ethoxyethene
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Serious eye damage/eye irritation (Category 2)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H225	Not available
H319	Causes serious eye irritation.
H336	Not available
H224	Not available

Precautionary Statement(s)

Code	Statement
P210	Not available
P233	Not available
P240	Not available
P241	Not available
P242	Not available
P243	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264+P265	Not available
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	Not available
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen
P319	Get medical help if you feel unwell.
P337+P317	If eye irritation persists: Get medical help.
P370+P378	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Ethyl vinyl ether
CAS Number : 109-92-2
Molecular Formula : C4H8O
Molecular Weight : 72.11
Parent Chemical : -
Synonyms : 1-Ethoxyethene
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice:
- Remove victim from exposure. Keep at rest in a position comfortable for breathing.
- Seek medical attention if symptoms persist or are severe.
- Show this Safety Data Sheet to the physician in attendance.

Inhalation:
- Move person to fresh air. If breathing is difficult, seek medical attention.
- If not breathing, provide artificial respiration by trained personnel and get immediate medical attention.

Skin contact:
- Remove contaminated clothing and shoes.
- Wash skin with plenty of water and soap.
- Get medical attention if irritation develops or persists.

Eye contact:
- Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
- Continue rinsing and obtain medical attention.

Ingestion:
- Rinse mouth with water.
- Do NOT induce vomiting unless directed by medical personnel.
- Never give anything by mouth to an unconscious person.
- Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
- Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media:
- Use extinguishing measures appropriate to surrounding fire.
- Not available.

Unsuitable extinguishing media:
- Not available.

5.2 Special hazards arising from the substance or mixture
- Flammable liquid/vapors may form explosive mixtures with air.
- Vapors may travel to a source of ignition and flash back.

- Hazardous combustion products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Cool unopened containers exposed to fire with water spray from a safe distance.
- Use water spray to reduce vapors if appropriate.
- Prevent fire-fighting water from entering drains and waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Evacuate unnecessary personnel.
- Eliminate all ignition sources. No smoking.
- Provide adequate ventilation.
- Avoid breathing vapors/mist and avoid contact with skin and eyes.
- Wear appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. Prevent entry into drains, sewers, and waterways.

6.3 Methods and material for containment and cleaning up
- Contain spill with inert absorbent material.
- Collect into suitable, properly labeled containers for disposal.
- Clean contaminated area with suitable methods; avoid generating vapors.

6.4 Reference to other sections
- For personal protective equipment see Section 8.
- For disposal considerations see Section 13.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Use only with adequate ventilation.
- Avoid breathing vapors/mist.
- Avoid contact with skin, eyes, and clothing.
- Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
- Use non-sparking tools and explosion-proof equipment where required.
- Take precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities
- Store in tightly closed container in a cool, dry, well-ventilated place.
- Keep away from ignition sources.
- Protect from heat and direct sunlight.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits:
- Not available.

Biological limit values:
- Not available.

8.2 Exposure controls
Engineering controls:
- Use local exhaust ventilation or other engineering controls to maintain airborne levels below applicable exposure limits.
- Use explosion-proof ventilation/equipment where appropriate.

Personal protective equipment (PPE):
Eye/face protection:
- Safety glasses with side shields or chemical splash goggles.

Skin protection:
- Wear protective gloves.
- Wear protective clothing as appropriate.

Respiratory protection:
- If ventilation is inadequate, use appropriate respiratory protection.

Hygiene measures:
- Wash hands thoroughly after handling.
- Remove contaminated clothing and wash before reuse.
- Do not eat, drink, or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- Not available.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- Not available.

10.4 Conditions to avoid
- Heat, flames, sparks, and other ignition sources.
- Static discharge.
- Not available.

10.5 Incompatible materials

- Not available.

10.6 Hazardous decomposition products
- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: HUMAN STUDIES: Vinyl ethyl ether was studied in clinical trials to investigate whether it was suitable as an anesthetic. Some patients participating in these studies suffered complications (generalized convulsions due to hypercarbia and respiratory and circulatory depression as well as respiratory and cardiac arrest), which were attributed to overdosage. The degree of muscle relaxation obtained with this type of anesthesia was considered to be inadequate. Liver function tests conducted after several hours of anesthesia showed that hepatic function was not affected. Urinalyses, blood counts and electrocardiograms obtained after anesthesia revealed slight, reversible changes in some cases. ANIMAL STUDIES: In rabbits, it caused only very mild irritation to the skin and eye. On acute oral administration, dermal application and inhalation exposure, vinyl ethyl ether was found to be of low toxicity. A rapid induction of CNS depression and rapid recovery from narcosis was noted with monkeys, dogs, rats. The clinical signs of intoxication were characterized by the CNS depressant effect of the substance. /OTHER TOXICITY INFORMATION/ A rapid induction of /CNS depression/ and rapid recovery from narcosis was noted with monkeys, dogs, rats, and man. Compared with diethylether approximately 50% less the quantity was required.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: No data available.
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: Aspiration hazard! Headache. Nausea.

Likely routes of exposure
- On acute oral administration, dermal application and inhalation exposure, vinyl ethyl ether was found to be of low toxicity.

Symptoms related to the physical, chemical and toxicological characteristics
- Some patients participating in these studies suffered complications (generalized convulsions due to hypercarbia and respiratory and circulatory depression as well as respiratory and cardiac arrest), which were attributed to overdosage. A rapid induction of CNS depression and rapid recovery from narcosis was noted with monkeys, dogs, rats, and man. There is a report of one case of transient damage to the human cornea, which was reversible after 48 hr. Aspiration hazard! Headache. Nausea.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- Not available.

12.2 Persistence and degradability
- Not available.

12.3 Bioaccumulative potential
- Not available.

12.4 Mobility in soil
- Not available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- Not available.

12.7 Other adverse effects
- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product:
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.

Contaminated packaging:
- Dispose of as unused product in accordance with applicable regulations.

Waste codes:
- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
- Not available.

14.2 UN proper shipping name
- Not available.

14.3 Transport hazard class(es)
- Not available.

14.4 Packing group
- Not available.

14.5 Environmental hazards
- Not available.

14.6 Special precautions for user
- Not available.

14.7 Maritime transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

15.2 Chemical safety assessment
- Not available.

SECTION 16: Other information

SECTION 16: Other information

Recommended use:
- Fine chemical. For laboratory and industrial use.

Further information:
- The information provided is based on data believed to be reliable; however, no warranty is expressed or implied regarding its accuracy or completeness.

Revision information:
- Not available.

SDS preparation date:
- Not available.

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