

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

ETHYL METHYL KETONE LR (BUTANONE)

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : ETHYL METHYL KETONE LR (BUTANONE)

Product code : SS0103002500
 Cas No:78-93-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification : SUVCHEM
 Chaitanya Tower, 2nd Floor, Office # 206,
 Siddharth Nagar, S.V. Road,
 Goregaon (West), Mumbai - 400062,
 Maharashtra, India.
 Contact: +91 22 28725393 / 94 / 95
 Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : F; R11
 T; R23/24/25-R39/23/24/25

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Category 1 - Danger (CLP : STOT SE 1) H370
 Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311
 Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
 Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Physical hazards : Flammable solids - Category 1 - Danger (CLP : Flam. Sol. 1) H228

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

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2. Hazards identification -DSD (continued)

Symbol(s)

Symbol(s)

: F : Highly flammable
T : Toxic

R Phrase(s)

: R11 : Highly flammable.
R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25 : Toxic : danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S Phrase(s)

:
S16 : Keep away from sources of ignition - No smoking.
S36/37 : Wear suitable protective clothing and gloves.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

Contains

: Pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words

: Danger

Hazard statements

: H228 : Flammable solid.
H301 : Toxic if swallowed.
H311 : Toxic in contact with skin.
H331 : Toxic if inhaled.
H370 : Causes damage to organ.

Precautionary statements
• Prevention

: P240: Ground/bond container and receiving equipment.
P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.
P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking.
P280: Wear protective gloves, protective clothing, eye protection, face protection.
P271: Use only outdoors or in a well-ventilated area.
P260: Do not breathe dust, fume, gas, mist, vapours, spray.
P264: Wash thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

• Response

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.
P307+P311: IF EXPOSED : Call a POISON CENTER or doctor.
P302+P352: IF ON SKIN : Wash with plenty of soap and water.
P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position comfortable for breathing.
P363: Wash contaminated clothing before reuse.
P361: Remove immediately all contaminated clothing.
P370+P378: In case of fire: Use for extinction.

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2. Hazards identification -DSD (continued)

- **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.
P405: Store locked up.
- **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
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P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Contains** : Pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate

2.3. Other hazards

- Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Pentasodium (carboxylatomethyl) : iminobis(ethylenenitrilo) tetraacetate		583-61-9	209-514-1	----	----	R10 Xn: R22 Xi: R37/38-41 Eye Dam 1 _ H318 Flam. Sol. 2 _ H228 Acute Tox. 4 (oral) _ H302 Skin Irrit. 2 _ H315 STOT SE 3 _ H335

4. First aid measures

4.1. Description of first aid measures

- Inhalation** : Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Specific treatment (see on this label). Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse. Wash with plenty of soap and water.
- Eye contact** : Obtain medical attention if pain, blinking or redness persist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

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4. First aid measures (continued)

4.2. Most important symptoms and effects, both acute and delayed

Symptoms relating to use : Repeated exposure to this material can result in absorption through skin causing significant health hazard.
 Danger of serious damage to health by prolonged exposure through inhalation.
 Swallowing a small quantity of this material will result in serious health hazard.
 Causes damage to organ.

4.3. Indication of any immediate medical attention and special treatment needed

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Specific treatment (see on this label). Call a POISON CENTER or doctor.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.
Surrounding fires : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Flammable class : Flammable solid.
Hazardous combustion products : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire : Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders : Equip cleanup crew with proper protection.
 Ventilate area.
 Avoid breathing dust, fume, gas, mist, vapours, spray.
Technical measures : Use special care to avoid static electric charges.

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6. Accidental release measures (continued)

Special precautions : Remove ignition sources. No naked lights. No smoking.
For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up methods : On land, sweep or shovel into suitable containers. Store away from other materials.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Handling : Handle empty containers with care because residual vapours are flammable. Do not breathe dust, fume, gas, mist, vapours, spray. Avoid breathing dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.
Technical protective measures : Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.
Special precautions : No naked lights. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original container in a cool, well ventilated place. Keep in fireproof place. Ground/bond container and receiving equipment. Keep container tightly closed.
Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Specific end use(s) : None.

8. Exposure controls/personal protection

8.1. Exposure controls

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8. Exposure controls/personal protection (continued)

Personal protection	: Avoid all unnecessary exposure.
• Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
• Hand protection	: Wear protective gloves.
• Eye protection	: Chemical goggles or safety glasses.
• Others	: When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits	: No data available.
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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C	: Liquid.
Colour	: Clear Colorless
Odour	: Sharp mint-like odor
Odour threshold	: No data available.
pH value	: Not applicable.
Melting point [°C]	: -87 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: 4040C
Flammability (solid, gas)	: Flammable. Flammable solid.
Flash point [°C]	: -3 °C
Boiling point [°C]	: 80 °C
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: 2,7
Vapour pressure [20°C]	: 95 hPa at 20 °C
Vapour pressure mm/Hg	: N/A
Vapour density	: 2,49
Density [g/cm3]	: 0,81
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: 29 g in 100 g of wat
Solubility in water	: N/A

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Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm ² /s]	: N/A

9.2. Other information

Explosive properties	: N/A
Explosion limits - upper [%]	: 10,10%
Explosion limits - lower [%]	: 1,80%
Oxidising properties	: No data available.

10. Stability and reactivity**10.1. Reactivity**

Reactivity	: Not established.
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10.2. Chemical stability

Chemical stability	: Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
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10.4. Conditions to avoid

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.
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10.5. Incompatible materials

Materials to avoid	: Strong acids. Strong bases.
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10.6. Hazardous decomposition products

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide. May release flammable gases.
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11. Toxicological information**11.1. Information on toxicological effects**

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11. Toxicological information (continued)

Toxicity information	: The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.
Acute toxicity	
• Inhalation	: Toxic if inhaled.
• Dermal	: Toxic in contact with skin.
• Ingestion	: Toxic if swallowed.
Corrosion	: Based on available data, the classification criteria are not met.
Irritation	: Based on available data, the classification criteria are not met.
Sensitization	: Based on available data, the classification criteria are not met.
Mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Toxic for reproduction	: Based on available data, the classification criteria are not met.
STOT-single exposure	: Causes damage to organ. Causes damage to organ.
STOT-repeated exposure	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity

Toxicity information	: The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.
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12.2. Persistence - degradability

Persistence - degradability	: Biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	: Not established.
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12.4. Mobility in soil

Mobility in soil	: Not established.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.
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12.6. Other adverse effects

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12. Ecological information (continued)

Environmental precautions : Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions : Hazardous waste due to toxicity.
 Handle empty containers with care because residual vapours are flammable.

14. Transport information

14.1. Land transport (ADR-RID)

Proper shipping name : ETHYL METHYL KETONE (METHYL ETHYL KETONE)
UN N° : 1193
H.I. nr : 33
ADR - Class : 3
Labelling - Transport : 3 : Flammable liquid.



ADR - Classification code : F1
 F1
ADR - Group : II
ADR - Packing instructions : P001 R001
ADR - Limited Quantity : 1 L
ADR - Tunnel code : D/E : Bulk or tank carriage: Passage forbidden through tunnels of category D and E. Other carriage: Passage forbidden through tunnels of category E.



14.2. Sea transport (IMDG). [English only]

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14. Transport information (continued)

Proper shipping name	: ETHYL METHYL KETONE (METHYL ETHYL KETONE)
UN N°	: 1193
IMO-IMDG - Class or division	: 3 : Flammable liquid.
IMO-IMDG - Packing group	: II
IMO-IMDG - Packing instructions	: P001
IMO-IMDG - Limited quantities	: 1 L
IMO-IMDG - Marine pollution	: No
EMS-Nr	: F-E S-D

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name	: ETHYL METHYL KETONE (METHYL ETHYL KETONE)
UN N°	: 1193
IATA - Class or division	: 3 : Flammable liquid.
IATA - Packing group	: II
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 353
- Passenger and Cargo - Maximum Quantity/Packing	: 5 L
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 364
- Cargo only - Maximum Quantity/Packing	: 60 L
IATA - Limited Quantities	: 1 L
ERG-Nr	: 3L

15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment	: It has not been carried out.
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MATERIAL SAFETY DATA SHEET (MSDS)
ETHYL METHYL KETONE LR (BUTANONE)

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

DISCLAIMER:

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

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