

Safety Data Sheet

#90026819 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Trimethylamine 33% (w/w) in Ethanol denatured with 2% Cyclohexane	75-50-3	C3H9N	10	24 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name	Trimethylamine 33% (w/w) in Ethanol denatured with 2% Cyclohexane
CAS number	75-50-3
EC / EINECS number	200-875-0
UFI code	EX4V-QEKR-2C81-KMN7
Chemical formula	C3H9N
Molecular weight	59.11
SMILES	CN(C)C

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

For research use, laboratory use, manufacture of chemicals. Not suitable for human or veterinary use.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Flam. Liq. 1; H224
 Acute Tox. 4; H302
 Asp. Tox. 1; H304
 Skin Corr. 1B; H314
 Acute Tox. 4; H332
 STOT SE 3; H335
 STOT SE 3; H336
 STOT RE 1; H372
 Aquatic Chronic 3; H412

2.2 Label elements



DANGER

CODE	HAZARD STATEMENT
H224	Extremely flammable liquid and vapour
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314 (sub cat. 1B)	Causes severe skin burns and eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H372	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects
CODE	PRECAUTIONARY STATEMENT
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

2.3 Other hazards

Does not meet PBT or vPvB criteria under REACH Annex XIII. This product does not contain any known or suspected Endocrine disruptors.

Composition / information on ingredients

3.2 Mixtures

COMPONENT 1

Name	Trimethylamine
CAS number	75-50-3
EC number	200-875-0
Concentration	31-35%
Classification according to Regulation (EC) No 1272/2008	Flam. Liq. 1; H224 Acute Tox. 4; H302 Skin Corr. 1; H314b Acute Tox. 4; H332 STOT SE 3; H335
Hazard statements	H224, H302, H314b, H332, H335
Acute toxicity estimate (ATE)	C ≥ 5.0 % STOT SE 3 H335

COMPONENT 2

Name	Ethanol (denatured)
CAS number	64-17-5
EC number	200-578-6
Concentration	62.5-67.5%
Classification according to Regulation (EC) No 1272/2008	Flam. Liq. 2; H225 Acute Tox. 4; H302 Eye Irrit. 2; H319 STOT RE 1; H372
Hazard statements	H225, H302, H319, H372

COMPONENT 3

Name	Cyclohexane
CAS number	110-82-7
EC number	203-806-2
Concentration	1.5-2.5%
Classification according to Regulation (EC) No 1272/2008	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 1; H400 Aquatic Chronic 1; H410
Hazard statements	H225, H304, H315, H336, H400, H410

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention.
Eye contact	Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.
Ingestion	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon oxides, Nitrogen oxides
Flammable

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Remove container from danger zone and cool with water. Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Absorb spillage with a suitable absorbent material.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	Ambient
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Conditions for safe storage (incompatibilities)	Store at ambient temperature. Store in a dry place. Store in a closed container.
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7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection**8.1 Control parameters**

Occupational exposure limits (OEL / WEL) Ethanol (denatured)
TWA: 1000 ppm
TWA; 1920 mg/m³
WEL - STEL: 3000 ppm
STEL; 5760 mg/m³

Cyclohexane:
STEL: 300 ppm 15 min
STEL: 1050 mg/m³ 15 min
TWA: 100 ppm 8 hr
TWA: 350 mg/m³ 8 hr

DNEC/PNEC data

DNEC (Ethanol denatured)
Acute effects systemic (Oral)- 87 mg/kg bw/day
Chronic effects systemic (Dermal)- 343 mg/kg bw/day
Acute effects local (Inhalation)- 1900 mg/m³
Chronic effects systemic (Inhalation)- 950 mg/m³

DNEC (Cyclohexane)
Chronic effects systemic (Dermal)-2016 mg/kg bw/day
Acute effects local (Inhalation)- 1400 mg/m³
Acute effects systemic (Inhalation)- 1400 mg/m³
Chronic effects local (Inhalation)- 700 mg/m³
Chronic effects systemic (Inhalation)- 700 mg/m³

8.2 Exposure controls**Eye / face protection**

Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection

Recommended gloves: Viton rubber (fluor rubber), 0.7mm (480mins).

Respiratory protection

Self-contained breathing apparatus
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

Other protection

No data available

Environmental exposure controls

No data available

SECTION 9

Physical & chemical properties**9.1 Information on basic physical and chemical properties****Appearance / physical state**

Liquid
DERIVED FROM: LITERATURE

Colour

Colourless
DERIVED FROM: LITERATURE

Odour	Pungent DERIVED FROM: LITERATURE
Melting / freezing point	Not applicable
Boiling point	Not applicable
Flammability	Not applicable
Lower and upper explosion limit	Not applicable
Flash point	-20 °C DERIVED FROM: LITERATURE
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
pH	Not applicable
Acidity	Base DERIVED FROM: LITERATURE
Kinematic viscosity	Not applicable
Solubility	Not applicable
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure	23 hPa @ 20°C DERIVED FROM: LITERATURE
Density (g/mL)	0.75 g/mL DERIVED FROM: LITERATURE
Relative vapour density	Not applicable
Particle characteristics	Not applicable

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, sparks, flames.

10.5 Incompatible materials

Strong oxidizing agents, acids, acid chlorides, acid anhydrides.

10.6 Hazardous decomposition products

See section 5

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	Oral Cat. 4 Inhalation Cat. 4
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Skin corrosion / irritation	Causes severe burns
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Eye corrosion / irritation	Causes serious eye damage
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Respiratory / skin sensitisation	<i>Not applicable</i>
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Carcinogenicity	<i>Not applicable</i>
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Mutagenicity	<i>Not applicable</i>
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Reproductive toxicity	<i>Not applicable</i>
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STOT (single / repeated exposure)	May cause damage to organs through prolonged or repeated exposure. Single exposure: May cause respiratory irritation. Causes drowsiness or dizziness
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Aspiration hazard	Yes
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11.2 Information on other hazards

Not applicable

SECTION 12

Ecological information

12.1 Toxicity

ATE (Fish)- 157.28 mg/l

ATE (Crustacean)- 33.09 mg/l

ATE (Algae)- 146.53 mg/l

Ref: Calculation method based on values from external SDS

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

UN2924

14.2 UN proper shipping name

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

14.3 Transport hazard class(es)

3 (8)



14.4 Packing group

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14.5 Environmental hazards

Not classified as environmentally hazardous for transport

14.6 Special precautions for user

Special precautions for user Handle in accordance with good industrial hygiene and safety practice

Transport category 1

Tunnel code (C/E)

Packing instruction (ADR) P001

Packing instruction (IMDG) P001

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences)

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work.

REACH code

Y110

ECHA notification

Not applicable

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Replaces previous SDS ver. 3 published 30th June 2022.

Harmonised Entries:

Trimethylamine- CLP00 612-001-01-6

Ethanol- CLP00 603-002-00-5

Cyclohexane- CLP00 601-017-00-1

Full list of H-Statements:

H224 Extremely flammable liquid and vapor

H225 Highly Flammable liquid and vapor

H302 Harmful if swallowed

H304 May be fatal if swallowed and enters airways

H314b Causes severe skin burns and eye damage

H315 Causes skin irritation

H319 Causes serious eye irritation

H332 Harmful if inhaled

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

H372 Causes damage to organs through prolonged or repeated exposure

H400 Very toxic to aquatic life

H402 Harmful to aquatic life

H410 Very toxic to aquatic life with long lasting effects

H412 Harmful to aquatic life with long lasting effects

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.