ChemicalBook

Chemical Safety Data Sheet MSDS / SDS

Triacetonamine

Revision Date:2026-03-21 Revision Number:1

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

Product identifier

Product name	: Triacetonamine
CBnumber	: CB4406066
CAS	: 826-36-8
EINECS Number	: 212-554-2
Synonyms	: 2,2,6,6-TETRAMETHYL-4-PIPERIDONE;TRIACETONAMINE

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

Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.
Uses advised against	: none

Company Identification

Company	: Chemicalbook
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone	: 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)

Signal word Danger

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Hazard statements

H412 Harmful to aquatic life with long lasting effects

H317 May cause an allergic skin reaction

H314 Causes severe skin burns and eye damage

H302 Harmful if swallowed

H290 May be corrosive to metals

SECTION 3: Composition/information on ingredients

Substance

Product name	: Triacetonamine
Synonyms	: 2,2,6,6-TETRAMETHYL-4-PIPERIDONE;TRIACETONAMINE
CAS	: 826-36-8
EC number	: 212-554-2
MF	: C9H17NO
MW	: 155.24

SECTION 4: First aid measures

General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Protection of first-aiders

For personal protection see section 8.

Notes to physician

No data available

SECTION 5: Firefighting measures

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

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

Specific hazards during fire fighting

Combustible. Vapours are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire.

Hazardous combustion products

Carbon oxides Nitrogen oxides (NOx)

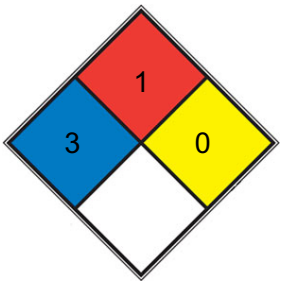
Specific extinguishing methods

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.

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

NFPA 704



■	HEALTH	3	Short exposure could cause serious temporary or moderate residual injury (e.g. liquid hydrogen, sulfuric acid, calcium hypochlorite, hexafluorosilicic acid)
■	FIRE	1	Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur. Includes some finely divided suspended solids that do not require heating before ignition can occur. Flash point at or above 93.3 °C (200 °F). (e.g. mineral oil, ammonia)
■	REACT	0	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium,N2)
□	SPEC. HAZ.		

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat

and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7: Handling and storage

Handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Storage

Conditions for safe storage

No metal containers.

Further information on storage conditions

Tightly closed. Dry.

Storage class

8B, Non-combustible, corrosive hazardous materials

Recommended storage temperature

2 - 8 °C

Further information on storage stability

Light sensitive.

Packaging material

Suitable material: Amber Glass Bottle/Jar

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures

No data available

Personal protective equipment

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type

Filter type P2

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Tightly fitting safety goggles

Skin and body protection

Flame retardant antistatic protective clothing.

Hand protection

Remarks

required

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

crystalline

Color

red brown

Odor

No data available

Odor Threshold

No data available

pH

No data available

Melting point/ range

34 - 38 °C

Method: lit.

Boiling point/boiling range

102 - 105 °C (24 hPa)

Method: lit.

Flash point

81 °C

Method: Regulation (EC) No. 440/2008, Annex, A.9,

Pensky-Martens closed cup GLP: yes

Evaporation rate

No data available

Flammability (solid, gas)

The product is not flammable.

Method: Flammability (solids)

GLP: yes

Burning rate

No data available

Self-ignition

365 °C 1,019 hPa

GLP: yes

Upper explosion limit / Upper flammability limit

No data available

Lower explosion limit / Lower flammability limit

No data available

Vapor pressure

0.3 hPa (26.3 °C)

Method: OECD Test Guideline 104

GLP: yes

Relative vapor density

No data available

Relative density

1.06 (20 °C)

Method: OECD Test Guideline 109

GLP: yes

Density

1.06 g/cm3 (27 °C)

Method: OECD Test Guideline 109

GLP: yes

Water solubility

249 g/l completely soluble (2 °C)

Method: OECD Test Guideline 105

GLP: yes

Partition coefficient: n-octanol/water

log Pow: -0.98 (25 °C)

Method Bioaccumulation is not expected. (ECHA): (calculated)

Autoignition temperature

360 °C

Method: DIN 51794

Decomposition temperature Viscosity: No data available

Viscosity, dynamic

3.66 mPa.s (50 °C)

Viscosity, kinematic

No data available

Flow time

No data available

Explosive properties

No data available

Oxidizing properties

none

Surface tension

54.7 mN/m, 1 g/l, 20 °C, OECD Test Guideline 115,

GLP: yes

Molecular weight

155.24 g/mol

Particle characteristics Particle size

No data available

Metal corrosion rate

May be corrosive to metals.

Solubility

DMSO, Methanol

Physical state

Solid

SECTION 10: Stability and reactivity

Reactivity

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents

Conditions to avoid

Strong heating.

Incompatible materials

No data available

Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - 1,330 mg/kg (OECD Test Guideline 401)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract

Inhalation: Irritating to respiratory system.

LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 4 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Irreversible effects on the eye - 72 h (OECD Test Guideline 405)

Remarks: Risk of blindness!

Respiratory or skin sensitization

Maximisation Test - Guinea pig

Result: positive (OECD Test Guideline 406)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli/Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

Classified based on available data. For more details, see section 2

Reproductive toxicity

Classified based on available data. For more details, see section 2

Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2

Aspiration hazard

Classified based on available data. For more details, see section 2

11.2 Additional Information

RTECS: TO0127900

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

Ecotoxicity

Components:

2,2,6,6-tetramethyl-4-piperidone:

Toxicity to fish

LC50 (Danio rerio (zebra fish)): 63 mg/l End point: mortality Exposure time: 96 h Test Type: static test Analytical monitoring: yes Method: Regulation (EC) No. 440/2008, Annex, C.1 GLP: yes

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 281.2 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Method: Regulation (EC) No. 440/2008, Annex, C.2 GLP: yes

Toxicity to algae/aquatic plants

EC10 (Desmodesmus subspicatus (green algae)): 254.7 mg/l Exposure time: 72 h Test Type: static test GLP: yes Remarks: (ECHA) ErC50 (Desmodesmus subspicatus (green algae)): 566.2 mg/l Exposure time: 72 h Test Type: static test GLP: yes Remarks: (ECHA)

Toxicity to microorganisms

EC50 (activated sludge): > 100 mg/l Exposure time: 3 h Test Type: static test GLP: yes Remarks: (ECHA)

Persistence and degradability

Components:

2,2,6,6-tetramethyl-4-piperidone:

Biodegradability

aerobic Inoculum: activated sludge Concentration: 11.6 mg/l Result: Not readily biodegradable. Biodegradation: 11 % Exposure time: 28 d Method: Directive 67/548/EEC Annex V, C.4.B. GLP: yes

Bioaccumulative potential

Components:

2,2,6,6-tetramethyl-4-piperidone:

Partition coefficient: noctanol/water

log Pow: -0.98 (25 °C) pH: 7 Method: (calculated) Remarks: Bioaccumulation is not expected. (ECHA)

Mobility in soil

No data available

Other adverse effects

Components:

2,2,6,6-tetramethyl-4-piperidone:

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

Disposal methods

Waste from residues

Offer surplus and non-recyclable solutions to a licensed disposal company.

SECTION 14: Transport information

International Regulations

IATA-DGR

UN/ID No. : UN 3263

Proper shipping name : Corrosive solid, basic, organic, n.o.s.

(2,2,6,6-tetramethyl-4-piperidone)

Class : 8

Packing group : II

Labels : Class 8 - Corrosive substances

Packing instruction (cargo aircraft) : 863

Packing instruction (passenger aircraft) : 859

IMDG-Code

UN number : UN 3263

Proper shipping name : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

(2,2,6,6-tetramethyl-4-piperidone)

Class : 8

Packing group : II

Labels : 8

EmS Code : F-A, S-B

Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

JT/T 617

UN number : UN 3263

Proper shipping name : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

(2,2,6,6-tetramethyl-4-piperidone)

Class : 8

Packing group : II

Labels : 8

Environmentally hazardous : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15: Regulatory information

National regulatory information

Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals

Hazardous Chemicals for Priority Management

Not applicable under SAWS

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export

Not applicable

SECTION 16: Other information

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals

ANTT - National Agency forTransport by Land of Brazil

ASTM - American Society for the Testing of Materials

bw - Body weight

CMR - Carcinogen, Mutagen or Reproductive Toxicant

DIN -Standard of the German Institute for Standardisation

DSL - Domestic SubstancesList (Canada)

ECx - Concentration associated with x% response

ELx - Loading rate associated with x% response

EmS - Emergency Schedule

ENCS - Existing and NewChemical Substances (Japan)

ErCx - Concentration associated with x% growth rate response

ERG - Emergency Response Guide

GHS - Globally Harmonised System

GLP - Good Laboratory Practice

IARC - International Agency for Research on Can- cer

IATA - International Air Transport Association

IBC - International Code for theConstruction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IC50 -Half maximal inhibitory concentration

ICAO - International Civil Aviation Organiza- tion

IECSC - Inventory of Existing Chemical Substances in China

IMDG - Interna- tional Maritime Dangerous Goods

IMO - International Maritime Organisation

ISHL -Industrial Safety and Health Law (Japan)

ISO - International Organisation forStandardisation

KECI - Korea Existing Chemicals Inventory

LC50 - Lethal Concen- tration to 50 % of a test population

LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)

MARPOL - International Convention for the Prevention of Pol- lution from Ships

MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods

n.o.s. - Not Otherwise Specified

Nch - Chilean Norm

NO(A)EC - No Observed (Adverse) Effect Concentration

NO(A)EL - No Observed (Adverse) Ef- fect Level

NOELR - No Observable Effect Loading Rate

NOM - Official MexicanNorm

NTP - National Toxicology Program

NZIoC - New Zealand Inventory of Chem- icals

OECD - Organisation for Economic Co-operation and Development

OPPTS - Of- fice of Chemical Safety and Pollution Prevention

PBT - Persistent, Bioaccumulative and Toxic substance

PICCS - Philippines Inventory of Chemicals and Chemical Sub- stances

(Q)SAR - (Quantitative) Structure Activity Relationship

REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning theRegistration, Evaluation, Authorisation and Restriction of Chemicals

SADT - Self-Accelerating Decomposition Temperature

SDS - Safety Data Sheet

TCSI - TaiwanChemical Substance Inventory

TDG - Transportation of Dangerous Goods

TECI -Thailand Existing Chemicals Inventory

TSCA - Toxic Substances Control Act (UnitedStates)

UN - United Nations

UNRTDG - United Nations Recommendations on theTransport of Dangerous Goods

vPvB - Very Persistent and Very Bioaccumulative

WHMIS - Workplace Hazardous Materials Information System