



# **Material Safety Data Sheet**

# **ACETONE**

# Section 1 - Chemical Product and Company Identification

MSDS Name: Acetone

# Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	EC no	EINECS/ELINCS
67-64-1	Acetone	200-662-2	NA

# Section 3 - Hazards Identification

#### 3.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 3.2 Label elements

## Labelling according Regulation (EC) No 1272/2008

Pictogram
Signal word
Danger

# Hazard statement(s)

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

#### **Precautionary statement(s)**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

# $Supplemental\ Hazard\ information\ (EU)$

EUH066 Repeated exposure may cause skin dryness or cracking.

# 3.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.





# Section 4 - First Aid Measures

## 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

# In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in 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

Dry powder Dry sand

# Unsuitable extinguishing media

Do NOT use water jet.

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# 5.4 Further information

Use water spray to cool unopened containers.

# Section 6 - Accidental Release Measures

# 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective

equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.





#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

For disposal see section 13.

# Section 7 - Handling and Storage

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# Section 8 - Exposure Controls, Personal Protection

# 8.1 Control parameters

#### Components with workplace control parameters

#### Predicted No Effect Concentration (PNEC)

Tredicted No Effect Concentration (TNEC)					
Compartment	Value				
Soil		33,3 mg/kg			
Marine water		1,06 mg/l			
Fresh water		10,6 mg/l			
Marine sediment		3,04 mg/kg			
Fresh water sediment	_	30,4 mg/kg			
Onsite sewage treatment plant		100 mg/l			

#### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

# Eye/face protection

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

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of





contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full- face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# Section 9 - Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear,liquid

Colour: Colourless

b) Odour Pungent, weakly aromatic

c) Odour Threshold No data available

d) pH 5 - 6 at 2,3 g/l at 25 °C

e) Melting point/freezing point Melting point/range: -94 °C

f) Initial boiling point 56 °C at 1013 hPa

and boiling range

g) Flash point -17,0 °C – closed cup

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available.

Upper/lower flammability
or explosive limits

Upper explosion limit:: 13%(V)
Lower explosion limit:: 2%(V)

Vapour pressure 533,3 hPa at 39,5 °C

245.3 hPa at 20.0 °C

) Vapour density No data available

m) Relative density 0,791 g/ml at 25°C





n) Water solubility soluble, in all proportions

o) Partition coefficient: No data available

n-octanol/water

p) Auto-ignition 465,0 °C

temperature

q) Decomposition Distillate in an undecomposed state at normal pressure.

temperature

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

9.2 Other safety information

Conductivity 0,01  $\mu$ S/cm at 20 °C Surface tension 23,2 mN/m at 20,0 °C

# Section 10 - Stability and Reactivity

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.

## 10.5 Incompatible materials

Bases, Oxidizing agents, Reducing agents, Acetone reacts violently with phosphorous oxychloride. Strong oxidizing agents

# 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

# Section 11 - Toxicological Information

### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - female - 5.800 mg/kg

Remarks: (ECHA)

LC50 Inhalation - Rat - 4 h - 76 mg/l

Remarks: Unconsciousness Drowsiness Dizziness

LD50 Dermal - Rabbit - 20.000 mg/kg

Remarks: (IUCLID)





#### Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

(Draize Test) Remarks:

(RTECS)

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h (Draize Test) Remarks:

(RTECS)

Risk of corneal clouding.

#### Respiratory or skin sensitisation

Maximisation Test - Guinea pig Result:

negative

Remarks: (ECHA)

Chronic exposure may cause dermatitis.

#### Germ cell mutagenicity

Mutagenicity (mammal cell test): chromosome aberration. Chinese hamster ovary cells

Result: negative Ames test

Salmonella typhimurium

Result: negative

In vitro mammalian cell gene mutation test

Mouse lymphoma test Result: negative

# Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Acute oral toxicity - Stomach/intestinal disorders, Risk of aspiration upon vomiting., Pulmonary failure possible after aspiration of vomit.

Acute inhalation toxicity - mucosal irritations

# Specific target organ toxicity - repeated exposure

No data available

# Aspiration hazard

No data available

### **Additional Information**

RTECS: AL3150000

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

Kidney - Irregularities - Based on Human Evidence

Skin - Dermatitis - Based on Human Evidence





# Section 12 - Ecological Information

12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) -

6.210 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and

other aquatic

invertebrates

static test LC50 - Daphnia pulex (Water flea) - 8.800 mg/l - 48 h

Remarks: (ECHA)

Toxicity to algae static test NOEC - M.aeruginosa - 530 mg/l - 8 d

(DIN 38412)

Remarks: (maximum permissible toxic concentration)(IUCLID)

Toxicity to bacteria static test EC50 - activated sludge - 61,15 mg/l - 30 min

(OECD Test Guideline 209)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d

Result: 91 % - Readily biodegradable.

(OECD Test Guideline 301B)

Biochemical Oxygen 1.850 mg/g

Demand (BOD) Remarks: (IUCLID)

Chemical Oxygen 2.070 mg/g

Demand (COD) Remarks: (IUCLID)

Theoretical oxygen 2.200 mg/g demand Remarks: (Lit.)

#### 12.3 Bioaccumulative potential

Does not bioaccumulate.

## 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effects

Additional ecological information No data available

# Section 13 - Disposal Considerations

## 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## **Contaminated packaging**

Dispose of as unused product.





# Section 14 - Transport Information

14.1 UN number

ADR/RID: 1090 IMDG: 1090 IATA: 1090

14.2 UN proper shipping name

ADR/RID: ACETONE IMDG: ACETONE IATA: Acetone

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

# Section 15 - Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

# Section 16 - Other Information

#### Full text of H-Statements referred to under sections 2 and 3.

EUH066 Repeated exposure may cause skin dryness or cracking.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

#### **Further information**

The above information is believed to be correct but does not support to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with Regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.