

# **SAFETY DATA SHEET**

## **Acetone**

Revision 8 26/04/23

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

# 1.1. Product identifier

Product name Acetone
Product number CK0049

**Synonyms; trade names** propan-2-one, propanone

**REACH registration number** 01-2119471330-49-xxxx

**CAS number** 67-64-1

**EU index number** 606-001-00-8 **EC number** 200-662-2

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

Identified uses Solvent for Industrial Use Chemical Intermediate Uses in coatings Laboratories Use in

cleaning agents Use as binders and release agents Rubber production and processing Polymer manufacturing Polymer processing Use in Oil and Gas field drilling and production

operations Blowing agents Mining chemicals

# 1.3. Details of the supplier of the safety data sheet

## Supplier:

Worcestershire Chemicals Ltd Unit 6 Oakdale Trading Estate Kingswinford, DY6 7JH Tel: 01562 755884

Email: <a href="mailto:info@chemi-kal.co.uk">info@chemi-kal.co.uk</a>
Web: <a href="mailto:www.chemi-kal.co.uk">www.chemi-kal.co.uk</a>

#### 1.4. Emergency telephone number

Emergency telephone 0870 190 6777 (National Chemical Emergency Centre) +44 (0)1270 502891

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

# Classification (EC 1272/2008)

**Physical hazards** Flam. Liq. 2 - H225

**Health hazards** Eye Irrit. 2 - H319 STOT SE 3 - H336

**Environmental hazards** Not Classified

2.2. Label elements

**EC number** 200-662-2

#### **Hazard pictograms**





Signal word Danger

**Hazard statements** H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P243 Take action to prevent static discharges.

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

contact lenses, if present and easy to do. Continue rinsing. P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Supplemental label

information

EUH066 Repeated exposure may cause skin dryness or cracking.

#### 2.3. Other hazards

## SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Product name Acetone

**REACH registration number** 01-2119471330-49-xxxx

**EU index number** 606-001-00-8

**CAS number** 67-64-1 **EC number** 200-662-2

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

General information Keep affected person away from heat, sparks and flames. Following ingestion, adsorbants

such as activated charcoal may be of value.

**Inhalation** Move affected person to fresh air at once. If breathing stops, provide artificial respiration.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention

immediately.

**Ingestion** Rinse mouth thoroughly with water. DO NOT induce vomiting. Get medical attention

immediately. Move affected person to fresh air and keep warm and at rest in a position

comfortable for breathing.

**Skin contact** Remove affected person from source of contamination. Immediately remove contaminated

clothing. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get

medical attention if irritation persists after washing.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes and get medical attention.

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

**General information** See Section 11 for additional information on health hazards.

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

**Specific treatments** Treat symptomatically.

#### **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Water spray, fog or mist.

Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** Fire creates: Oxides of carbon. The product is highly flammable. Forms explosive mixtures

with air. Vapours are heavier than air and may spread near ground and travel a considerable

distance to a source of ignition and flash back.

#### 5.3. Advice for firefighters

# Protective actions during firefighting

Control run-off water by containing and keeping it out of sewers and watercourses. Do not use water jet as an extinguisher, as this will spread the fire. Use water spray to reduce vapours. If risk of water pollution occurs, notify appropriate authorities. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Wear self contained breathing apparatus

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear appropriate protective clothing and respiratory protection. Ensure good ventilation.

Avoid inhalation of vapours and contact with skin and eyes. Vapour may cause drowsiness

and dizziness. Repeated exposure can cause skin drying and cracking.

#### 6.2. Environmental precautions

**Environmental precautions** Do not let the product or washing down water enter natural water courses or the sewer.

## 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near

spillage. Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Absorb in vermiculite, dry sand or earth and place into containers. Do

not allow to enter drains, sewers or watercourses.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

**Usage precautions** Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and

eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Container must be kept tightly closed when not in

use.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Keep away from oxidising materials, heat and flames. May attack some plastics, rubber and coatings. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Earth container and transfer equipment to eliminate sparks from static electricity. Suitable container materials: Mild steel. Stainless steel. Aluminium and its alloys. Copper and its alloys. Do not store in certain plastics.

Storage class

Flammable liquid storage.

### 7.3. Specific end use(s)

#### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

**DNEL** Industry - Dermal; Long term : 186 mg/kg/day

Industry - Inhalation; Short term: 2420 mg/m³ Industry - Inhalation; Long term: 1210 mg/m³ Consumer - Oral; Long term: 62 mg/kg/day Consumer - Dermal; Long term: 62 mg/kg/day Consumer - Inhalation; Long term: 200 mg/m³

PNEC - Fresh water; 10.6 mg/l

marine water; 1.06 mg/l
Sediment; 30.4 mg/kg
Sediment; 3.04 mg/kg
Soil; 0.112 mg/kg
STP; 29.5 mg/l

## 8.2. Exposure controls

#### Protective equipment







Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

**Eye/face protection** 

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection** 

Wear protective gloves made of the following material: Butyl rubber. Use full length gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. Determined penetration times carried out in accordance with EN374 part III are not performed under practical conditions, therefore, a maximum wearing time corresponding to 50% of the penetration time is recommended.

Other skin and body protection

Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent repeated or prolonged skin contact. In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Provide eyewash station and safety shower.

**Hygiene measures** Provide eyewash station and safety shower. Wash at the end of each work shift and before

eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Do not smoke in work area. Contaminated clothing should be placed in a closed container for

disposal or decontamination.

**Respiratory protection** If ventilation is inadequate, suitable respiratory protection must be worn. Wear a full

facepiece, supplied-air respirator.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance Clear liquid.

Colour Colourless.

**Odour** Sweetish. Aromatic.

pH pH (diluted solution): 5-6 @ 50%

Melting point  $-95^{\circ}$ C Initial boiling point and range  $56^{\circ}$ C

**Flash point** -17°C Closed cup.

**Evaporation rate** 2.0 (diethyl ether = 1)

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 2.50 Upper flammable/explosive limit: 14.3

**Vapour pressure** 240 hPa @ 20°C

Vapour density 2.1

**Relative density** 0.79 @ 20°C

**Solubility(ies)** 100 @ 20°C Miscible with water.

Partition coefficient :-0.24

Auto-ignition temperature 465°C

9.2. Other information

**Refractive index** 1.358 - 1.359

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

**Reactivity** The following materials may react with the product: Alkalis.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

# 10.3. Possibility of hazardous reactions

**Possibility of hazardous** 

Will not polymerise.

reactions

10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong alkalis. Amines.

## 10.6. Hazardous decomposition products

**Hazardous decomposition** 

Fire creates: Oxides of the following substances: Carbon.

products

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

**Toxicological effects** Low order of acute toxicity. Oral rat LD50:1700-10700mg/kg. A single application to the rabbit

eye produced conjunctival irritation and transient corneal damage (stippling epithelial damage): A single 4h semi occlusive application to intact rabbit skin produced no sign of dermal irritation. The product did not exhibit mutagenic activity (with and without matabolic activation) in: Salmonella typhimurium. Chinese hamster ovary cells and human lymphocytes. Negative results were achieved during studies designed to investigate the potential to induce

birth defects by inhalation.

**Acute toxicity - dermal** 

Acute toxicity dermal (LD50

15,800.0

mg/kg)

**Species** Rat

**Skin corrosion/irritation** 

Animal data Irritating.

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating.

**Skin sensitisation** 

**Skin sensitisation** Not sensitising.

**Germ cell mutagenicity** 

**Genotoxicity - in vitro** : Negative.

**Carcinogenicity** 

**Carcinogenicity** Not available.

Reproductive toxicity

Reproductive toxicity - fertility Not available.

Specific target organ toxicity - single exposure

**STOT - single exposure** No information available.

Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL 900 mg/kg, Oral, Rat

**Aspiration hazard** 

**Aspiration hazard** No information available

**Inhalation** Vapours may cause drowsiness and dizziness.

**Skin contact** Repeated exposure may cause skin dryness or cracking.

**Eye contact** Irritating to eyes. May cause chemical eye burns.

Acute and chronic health

hazards

Gas or vapour is harmful on prolonged exposure or in high concentrations. Symptoms following overexposure may include the following: Irritation of eyes and mucous membranes.

Narcotic effect. A single exposure may cause the following adverse effects: Central nervous system depression. Prolonged contact may cause dryness of the skin. Repeated exposure

may cause chronic eye irritation.

**Route of exposure** Inhalation Skin absorption

Target organs Central nervous system Eyes Gastro-intestinal tract Respiratory system, lungs Skin

**Medical symptoms** Irritation of eyes and mucous membranes. Upper respiratory irritation. Skin irritation.

**Medical considerations** Skin disorders and allergies.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

**Acute aquatic toxicity** 

Acute toxicity - fish LC50, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 8800 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC10, 8 days: 530 mg/l, Microcystis aeruginosa (blue-green alga)

Acute toxicity - microorganisms

....

EC10, 30 minutes: 1000 mg/l, Activated sludge

## 12.2. Persistence and degradability

Persistence and degradability Readily biodegradable.

# 12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating. BCF: 3,

Partition coefficient : -0.24

12.4. Mobility in soil

Adsorption/desorption

Water -: 1.5 @ 20°C

coefficient

assessment

Henry's law constant 2929 Pa m3/mol @ 25°C

## 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

. . .

This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

Other adverse effects No known significant effects.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

General information Contaminated packages must be completely emptied before sending away for laundering and

re-use.

**Disposal methods**Waste material and any included combustible absorbent and containers should be suitable for

incineration at an approved facility. Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Confirm disposal procedures with environmental engineer and local regulations. Uncleaned empty packages should be disposed of in the same manner as the contents. Do not allow runoff to sewer,

waterway or ground.

Waste class EWC NUMBER: Allocation of a waste code number in accordance with the European Waste

Catalogue, should be carried out in agreement with an EA authorised waste disposal

company.

## **SECTION 14: Transport information**

#### 14.1. UN number

**UN No. (ADR/RID)** 1090

**UN No. (IMDG)** 1090

**UN No. (ICAO)** 1090

**UN No. (ADN)** 1090

## 14.2. UN proper shipping name

Proper shipping name ACETONE

(ADR/RID)

Proper shipping name (IMDG) ACETONE

Proper shipping name (ICAO) ACETONE

Proper shipping name (ADN) ACETONE

# 14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

## **Transport labels**



## 14.4. Packing group

ADR/RID packing group ||

IMDG packing group

ICAO packing group

ADN packing group

## 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

**EmS** F-E, S-D

ADR transport category 2

Emergency Action Code •2YE

**Hazard Identification Number** 33

(ADR/RID)

**Tunnel restriction code** (D/E)

## 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

# SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) No 1272/2008 CLP.

Regulation (EC) No 1907/2006 REACH.

**Guidance** Workplace Exposure Limits EH40.

# 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

#### **Inventories**

## **EU - EINECS/ELINCS**

Present.

Canada - DSL/NDSL

Present.

US - TSCA

Present.

**Australia - AICS** 

Present.

Japan - ENCS

Present.

Korea - KECI

Present.

China - IECSC

Present.

Philippines - PICCS

Present.

**New Zealand - NZIOC** 

Present.

# **SECTION 16: Other information**

## **General information**

Since empty containers retain product residue, follow label warnings, even after container is emptied. For further Health and Safety information contact: Health and Safety Officer. Labels should not be removed from containers until they have been cleaned and no product remains within.

# Key literature references and sources for data

**Approved Supply List Dangerous Substances Directive Dangerous Preparations Directive** 

**Revision comments** Updated company address.

**Issued by** Compliance Department

**Revision date** 15/10/2018

**Revision** 8

Supersedes date 14/04/2016

SDS number 0375

SDS status Approved.

**Hazard statements in full** H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.