

Safety Data Sheet

according to 1907/2006/EC, Article 31

Version number: 18 Revision Date: 25.06.2019

Product Name: Acetone



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1. Product identifier

Trade name: Acetone

CAS number: 67-64-1

EC number: 200-662-2

Index number: 606-001-00-8

Registration number: 01-2119471330-49-XXXX

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

Manufacture of Substance

Distribution of substance

Laboratory

Release agent

Rubber production

Polymer processing

Cleaning Agents

Oil field drilling

Blowing Agents

Coatings

Adhesives

• Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU8 Manufacture of bulk, large scale chemicals (including petroleum products)

SU9 Manufacture of fine chemicals

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU12 Manufacture of plastics products, including compounding and conversion

SU17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

SU24 Scientific research and development

• Product category

PC1 Adhesives, sealants

PC9a Coatings and paints, thinners, paint removers

PC9b Fillers, putties, plasters, modelling clay

PC18 Ink and toners

PC19 Intermediate

PC21 Laboratory chemicals

PC29 Pharmaceuticals

PC31 Polishes and wax blends

PC32 Polymer preparations and compounds

PC35 Washing and cleaning products (including solvent based products)

PC38 Welding and soldering products, flux products

• Application of the substance / the mixture Solvent

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1.3. Details of the supplier of the safety data sheet

Company:

Kilo Ltd
Ham Lane
Kingswinford
West Midlands
DY6 7JU
info@kiloltd.co.uk

Emergency telephone number:

+44 (0) 1384 293222 (Mon-Fri 9am – 5pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

2.2. Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS02



GHS07

- Signal word Danger

- Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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• Precautionary statements

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

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P243 Take precautionary measures against static discharge.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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+P233 Store in a well-ventilated place. Keep container tightly closed.

• Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

• 2.3 Other hazards

• Results of PBT and vPvB assessment

• PBT: Not applicable.

• vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

• 3.1 Chemical characterisation: Substances

• CAS No. Description

67-64-1 acetone

• Identification number(s)

• EC number: 200-662-2

• Index number: 606-001-00-8

• SVHC Not listed as a SVHC at the date of this document

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

• After inhalation:

Seek medical treatment, if any signs of impaired recovery or behaviour.

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

Seek immediate medical advice.

• After skin contact:

If skin irritation continues, consult a doctor.

Repeated skin contact may result in irritation and dermatitis. Always wear protective gloves suitable for this product.

• After eye contact:

Rinse opened eye for at least 15 minutes under clean running water. Remove contact lenses if possible. Seek immediate medical advice.

Continue to irrigate the eye with clean water.

Seek immediate medical advice.

• After swallowing:

Do NOT induce vomiting; rinse mouth with water, call for medical help immediately.

Rinse out mouth and then drink plenty of water if patient is fully conscious.

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

Headache

Dizziness

Nausea

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

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

• Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with aqueous film forming foam (AFFF). Cool containers with water spray.

• For safety reasons unsuitable extinguishing agents: Water with full jet

5.2. Special hazards arising from the substances or mixture:

Can form explosive gas-air mixtures.

Run-off to sewers may lead to flammable liquids risk

5.3. Advice for firefighters:

• **Protective equipment: Respiratory protective device.**

• **Additional information**

Keep sources of ignition away - flammable liquids and vapours.

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Product is fully water miscible

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep people at a distance and stay on the windward side.

Keep away from ignition sources.

Wear protective clothing.

6.2. Environmental precautions:

In case of seepage into the ground inform responsible authorities.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Send for recovery or disposal in suitable receptacles - may need to be UN approved.

Urgent consideration should be given to blanketing spillage with AFFF Foam Spray to seal from sources of ignition as a precautionary measure.

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6.4. Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Keep receptacles tightly sealed.

Keep away from heat and direct sunlight.

Use solvent-proof equipment.

Store in cool, dry place in tightly closed receptacles.

Take note of emission threshold.

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

• Information about fire - and explosion protection:

Keep ignition sources away - no naked sparks/flames/fires. Ensure electrical equipment is protected to correct Zone rating (DSEAR Assessed)

Protect against electrostatic charges. Where required - ensure bonding and earthing of containers and process equipment.

Static generation and accumulation may be increased when using fine filters, strainers, mixing with powders and immiscible liquids, high energy/speed mixers. Take extra precautions. Allow static relaxation time for charges to dissipate before next steps. Do not splash fill.

Refer to IEC/TS 60079-32-1: Electrostatic hazards, guidance.

Refer to NFPA 77: Recommended Practices on Static Electricity

Do not spray onto a naked flame, hot surfaces, electrical switchgear, live/battery connected electrics, or near to any potential sources of ignition.

Flammable gas-air mixtures may form in empty receptacles.

Wear shoes with conductive soles.

7.2. Conditions for safe storage, including any incompatibilities:

• Storage:

• Requirements to be met by storerooms and receptacles:

Store in a cool location.

Provide solvent resistant, sealed floor.

Prevent any seepage into the ground.

Provide ventilation for receptacles.

Use only receptacles specifically permitted for this substance/product.

Unsuitable material for receptacle: aluminium.

Store in area marked with EX signs under Dangerous Substances and Explosive Atmosphere Regs.

Follow HSE guidance for storage of flammable substances.

Flameproof/explosion proof electrical equipment must be used (ATEX Regulations)

Only store in suitable bunded storage areas. Do not store plastic IBC's with metal drums of other flammable substances.

• Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

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• Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

Store in a cool place.

You are recommended to refer to HSE publications HSG51 - The Storage of Flammable Liquids in Containers; and HSG140 - The Safe Use and Handling of Flammable Liquids, for more detailed understanding of the practices to be adhered to.

Composite plastic IBC's risk sudden and total loss of product in event of fire. Ensure bunded areas are adequate.

Ideally, do not store composite plastic IBC's with other packaged flammable goods.

• **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1. Control parameters:

· Ingredients with limit values that require monitoring at the workplace:	
67-64-1 2-propanone REACH Reg No. 01-2119471330-49-XXXX	
WEL	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm

• **Additional information:** The lists valid during the making were used as basis.

8.2. Exposure controls:

Personal protective equipment:

• **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Avoid alcohol consumption while working with the product.

• **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation - when exposure levels are likely to be exceeded.

Filter A - For Organic vapours with boiling point > 65 deg C

Filter AX - For Organic vapours with boiling point < 65 deg C - Single use/limited use filter

You should refer to the respirator/filter manufacturer for final guidance on the type of mask and filter to use.

• **Recommended filter device for short term use: Filter AX**

• **Protection of hands:**

Solvent resistant gloves. Use gloves approved to BS EN 374 : Protective Gloves against Chemicals.

Chemical Resistant Gloves, class 4 or higher for prolonged exposure.

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Durability and suitability of glove material is usage dependent. We recommend advice from an experienced glove supplier.

Always wear gloves with clean hands. Contaminated gloves should always be replaced.

• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

• Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Ideally a breakthrough time of >480 minutes is recommended, but >240 minutes should be viewed as minimum for continuous contact.

• Eye protection:



Tightly sealed goggles or equivalent eyewear. Approved to EN166 Standard.

• Body protection:

Protective work clothing, ideally with anti-static properties - especially if a DSEAR risk assessment warrants this type of clothing.

• Risk management measures

Carry out risk assessment under Dangerous Substances and Explosive Atmospheres Regulations (DSEAR), COSHH.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

• General Information

• Appearance:

Form: Liquid

Colour: Colourless (Aged product may darken depending upon storage conditions and time period)

• **Odour:** Characteristic

• **Odour threshold:** Not determined.

• **pH-value:** Not determined.

• Change in condition

Melting point/freezing point: 94.7 °C

Initial boiling point and boiling range: 55.8-56.6 °C

• **Flash point:** < -18 °C

• **Ignition temperature:** 465 °C

• **Decomposition temperature:** Not determined.



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- **Auto-ignition temperature:** Not determined.
 - **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
 - **Explosion limits:**
Lower: 2.6 Vol %
Upper: 13 Vol %
 - **Vapour pressure at 20 °C:** 233 hPa
 - **Density at 20 °C:** 0.79 g/cm³
 - **Relative density** Not determined.
 - **Vapour density** Not determined.
 - **Evaporation rate** Not determined.
 - **Solubility in / Miscibility with water:** Fully miscible.
 - **Partition coefficient: n-octanol/water:** Not determined.
 - **Viscosity: Dynamic at 25 °C:** 32 mPas
 - **Kinematic:** Not determined.
 - **Solvent content:** 100 %
- **9.2 Other information** No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

• 10.1 Reactivity

No further relevant information available.

• 10.2 Chemical stability

vapours form potentially explosive mixtures with air.

• **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications and industry good practice.

• 10.3 Possibility of hazardous reactions

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised, and when vapour/air concentrations are within explosive limits.

Will require a source of ignition to create combustions unless heated above auto-ignition temperature.

Avoid/remove all sources of ignition within zone around work area when product in use.

Danger of receptacles bursting because of high vapour pressure when heated.

• 10.4 Conditions to avoid

Avoid splash discharge/filling due to static ignition risk.

Sources of Ignition, (sparks, flames, static discharges, hot surfaces)

Avoid any hot work near to this material

• 10.5 Incompatible materials:

Acids, strong oxidising agents, strong alkalis.

• 10.6 Hazardous decomposition products:

Carbon monoxide if incomplete combustion.

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SECTION 11: TOXOLOGICAL INFORMATION

11.1. Information on toxicological effects:

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Prolonged contact with any solvent can result in skin irritation, not classed as an irritant. Always wear suitable gloves when handling.

· **Serious eye damage/irritation**

Causes serious eye irritation.

· **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

· **Carcinogenicity**

Based on available data, the classification criteria are not met.

· **Reproductive toxicity**

Based on available data, the classification criteria are not met.

· **STOT-single exposure**

May cause drowsiness or dizziness.

· **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.

SECTION 12: ECOLOGICAL INFORMATION

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability**

No further relevant information available.

· **12.3 Bioaccumulative potential**

No further relevant information available.

· **12.4 Mobility in soil**

No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

• Recommendation

Must not be disposed together with household refuse. Do not allow product to reach sewage system.

• European waste catalogue Refer to our office for EWC codes for disposal of used solvent.

• Uncleaned packaging:

• Recommendation:

Waste Solvent Disposal must be made according to official regulations. Refer to Hazardous Waste Regulations 2005.

Requires movement under Consignment note by licensed waste carrier.

Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning.

Containers to be scrapped as waste must be cleaned so that no hazardous substances remain, otherwise uncleaned containers containing residue for scrap will need to be consigned as hazardous waste as per WM3.

• **Recommended cleansing agents:** Water, if necessary, together with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

• 14.1 UN-Number

• **ADR, IMDG, IATA UN1090**

• 14.2 UN proper shipping name

• **ADR 1090 ACETONE**

• **IMDG, IATA ACETONE**

• 14.3 Transport hazard class(es)

• **ADR, IMDG, IATA**



• **Class 3 Flammable liquids.**

• **Label 3**

• 14.4 Packing group

• **ADR, IMDG, IATA II**

• 14.5 Environmental hazards:

• **Marine pollutant:** No

• 14.6 Special precautions for user

• **Warning:** Flammable liquids.

• **Danger code (Kemler):** 33

• **EMS Number:** F-E,S-D

• **Stowage Category** E

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14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

• Transport/Additional information:

• ADR

• Limited quantities (LQ) 1L

• Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

• Transport category 2

• Tunnel restriction code D/E

• IMDG

• Limited quantities (LQ) 1L

• Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

• UN "Model Regulation": UN 1090 ACETONE, 3, II

SECTION 15: REGULATORY INFORMATION

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

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

• National regulations:

• Other regulations, limitations and prohibitive regulations

The Dangerous Substances and Explosive Atmosphere Regulations (DSEAR)

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation.

• Relevant phrases None

• Training hints

Make users aware of the contents of this document and train according to use and risks within your operation.

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• **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

• * Data compared to the previous version altered.

The document above has to be considered as technical information, it is presented in good faith, but no warranty is given. The above information does not release the customer from making their own controls and checks upon receipt of the product. In view of the great variety of possible applications, no assurance is given of the suitability of the product for any particular purpose. Furthermore, since Kilo as a material supplier is unable to exercise any control over the use of the products, including designing, testing, specifying a compound or product incorporating any of the products, it is the sole responsibility of the buyer who shall assume any consequences thereof, whether direct or indirect, and whatsoever its nature, and the seller makes no warranties in respect thereof.

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