

BEECROFT & PARTNERS LTD.

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Version 4.2

Revision date 04/02/2018

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name/designation Acetone
Product No. CA1404-24
Substance name Acetone
CAS No. 67-64-1
INDEX no. 606-001-00-8
REACH registration No. 01-2119471330-49
other means of identification 2-Propanone Dimethyl ketone DMK Propanone

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

Relevant identified uses for laboratory use and chemical production.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

: Prime Chemicals,
Corporation Yard,
Rawmarsh Road,
Rotherham,
S60 1SA,
UK

Telephone +44 (0) 1709 377881
Fax +44 (0) 1709 369264
E-mail address sales@beecroft-science.co.uk

Emergency telephone

Telephone +44 (0) 1709 377881

2. Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

hazard classes and hazard categories	Hazard Statements	classification procedure	remark
Flammable liquid, category 2	H225		
Eye irritation, category 2	H319		

Specific target organ toxicity (single exposure), category 3, narcotic effect

H336

2.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC

Hazard symbols:	R-phrases
F	R11
Xi	R36
	R66
	R67

2.2 Label elements

2.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]



Signal word

Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.2.2 Labelling (67/548/EEC or 1999/45/EC)

Hazard symbols:

F, Xi

R-phrases

R11	Highly flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

S-phrases

S9	Keep container in a well-ventilated place.
S16	Keep away from sources of ignition - No smoking.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other hazards

SVHC

No

3. Composition/ Information on ingredients

Molecular formula	C ₃ H ₆ O
Molecular weight (g/mol)	58.08 g/mol
CAS No.	67-64-1
EC No	200-662-2
INDEX no.	606-001-00-8

4. First-aid measures

4.1 General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

4.2 After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

4.3 In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

4.4 After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

4.5 After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting. Give nothing to eat or drink.

4.6 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.7 Information to physician:

Symptoms	No data available
Hazards	No data available
Treatment	No data available

5. Firefighting measures

5.1 Suitable extinguishing media

Water spray ABC-powder Carbon dioxide (CO₂) Nitrogen

5.2 Extinguishing media which must not be used for safety reasons:

no restriction

5.3 Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO₂) Carbon monoxide

5.4 Advice for firefighters

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

5.5 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Use personal protection equipment. The accumulation in lowlying or closed rooms can cause increased danger of fire and explosion. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Prevent spread over a wide area (e.g. by containment or oil barriers). Soak up inert absorbent and dispose as waste requiring special attention.

6.4 Additional information

Clear spills immediately.

7. Handling and storage

7.1 Precautions for safe handling

Avoid: Inhalation. Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Keep away from sources of ignition. - No smoking. Usual measures for fire prevention. Take precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities

storage temperature

15-25°C

Keep container tightly closed in a cool, well-ventilated place. Keep/Store away from combustible materials.

7.3 Specific end use(s)

No data available

8. Exposure controls / Personal protection

8.1 Control parameters

Ingredient (Designation)	Limit value type (country of origin):	Limit value	Regulatory information
Acetone	TWA (EU)	500 ppm, 1210 mg/m ³	2000/39/EC

8.2 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

8.3 Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

8.3.1 Eye / face protection

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

8.3.2 Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms: DIN EN 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.

By short-term hand contact

Suitable material:

NBR (Nitrile rubber)

Thickness of the glove material

0,425 mm

Breakthrough time (maximum wearing time)

10 min

Recommended glove articles

VWR 112-0971

By long-term hand contact	
Suitable material:	Butyl caoutchouc (butyl rubber)
Thickness of the glove material	0,50 mm
Breakthrough time (maximum wearing time)	>480 min
Recommended glove articles	VWR 112-1570

8.3.3 Protective clothing

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

8.3.4 Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Suitable respiratory protection apparatus:	Full-/half-/quarter-face masks (DIN EN 136/140)
Recommendation	VWR 111-0206
Suitable material:	A2B2E2K2P3
Recommendation	VWR 111-0059

8.4 Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state	liquid
Colour	colourless
(b) Odour	No data available
(c) Odour threshold	No data available

Safety relevant basic data

(d) pH	No data available
(e) Melting point/freezing point	-95.4°C
(f) Initial boiling point and boiling range	56.2°C (1013 hPa)
(g) Flash point	Max. -20°C (closed cup)
(h) Evaporation rate	No data available
(i) Flammability (solid, gas)	Highly flammable liquid and vapour.
(j) Upper/lower flammability or explosive limits	
Lower explosion limit (Vol-%)	2.6
Upper explosion limit (Vol-%)	12.8
(k) Vapour pressure	233 hPa (20°C)
(l) Vapour density	2.01 (20°C)
(m) Relative density	0.792 g/cm³ (20°C)
(n) Solubility(ies)	
Water solubility (g/l)	soluble
at °C:	20
Soluble (g/l) in	No data available

(o) Partition coefficient: n-octanol/water	-0.24 (20°C)
(p) Auto-ignition temperature	465°C
(q) Decomposition temperature	No data available
(r) Viscosity	
Kinematic viscosity	No data available
Dynamic viscosity	0.32 mPa*s (20°C)
(s) Explosive properties	not applicable
(t) Oxidising properties	not applicable

9.2 Other information

Bulk density	No data available
refraction index	1.3591 (589 nm, 20°C)
dissociation constant	No data available
Surface tension	No data available
Henry constant	No data available

10. Stability and reactivity

10.1 Reactivity

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Formation of potentially explosive mixtures with: Oxidising agent, strong Reducing agent, strong Nitric acid
 Trichloromethane Peroxide Violent reaction with: Alkali (lye) Oxidising agent Reducing agent Exothermic reaction
 with: Bromine Chlorine

10.4 Conditions to avoid

UV-radiation/sunlight Heating This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/electrical equipment).

10.5 Incompatible materials

Rubber articles Plastic articles

10.6 Hazardous decomposition products

No data available

10.7 Additional information

No data available

11. Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Effective dose	LD50: 5800 mg/kg
species:	rat
Exposure time	
remark	
source	RTECS

Acute dermal toxicity

Effective dose	LD50: 20000 mg/kg
species:	rabbit
Exposure time	
remark	
source	IUCLID

Acute inhalation toxicity

Effective dose	LC50: 76 mg/l
species:	rat
Exposure time	4h
remark	
source	

Irritant and corrosive effects

Primary irritation to the skin

Exposure time	
species:	
Result	

Irritation to eyes

Exposure time	
species:	
Result	

Irritation to respiratory tract

Exposure time	
species:	
Result	

Sensitisation

In case of skin contact	not sensitising.
After inhalation	not sensitising.

Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure)

not relevant

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity/Genotoxicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not relevant

11.2 Other adverse effects

No data available

11.3 Additional information

No data available

12. Ecological information

12.1 Ecotoxicity

Acute (short-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) fish toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) daphnia toxicity

LC50: No data available

EC50

species:

Exposure time

Acute (short-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

Chronic (long-term) algae toxicity

LC50: No data available

EC50

species:

Exposure time

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

(o) Partition coefficient: n-octanol/water -0.24 (20°C)

12.4 Mobility in soil

No data available

12.5 Results of PBT assessment

No data available

12.6 Other adverse effects

No data available

13. Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product

07 01 04 (other organic solvents, washing liquids and mother liquors)

Appropriate disposal / Package

13.2 Additional information

No data available

14. Transport information

14.1 Land transport (ADR/RID)

UN-No.	1090
Proper Shipping Name	ACETONE
Class(es)	3
Classification code:	F1
Packing group	II
Hazard label(s)	3

14.2 Sea transport (IMDG)

UN-No.	1090
Proper Shipping Name	ACETONE
Class(es)	3
Classification code:	F1
Packing group	II
Marine pollutant	
Segregation group	

14.3 Air transport (ICAO-TI / IATA-DGR)

UN-No.	1090
Proper Shipping Name	ACETONE
Class(es)	3
Classification code:	F1
Packing group	II

14.4 Additional information

No data available

15. Regulatory information

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

Water hazard class (WGK)	1
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15.2 Chemical Safety Assessment

No data available

16. Other information

16.1 Relevant R-, H- and EUH-phrases (Number and full text)

R11	Highly flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

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

EUH066	Repeated exposure may cause skin dryness or cracking.
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16.2 Additional information

Indication of changes

SECTION 14: Transport information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.