

SAFETY DATA SHEET ACETONE

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

1.1. Product identifier

Product name	ACETONE
Product number	586
Synonyms; trade names	DIMETHYL KETONE,DMK,2- PROPANONE,PROPAN-2-ONE,ACETONE MIN 99.5%,ACETONE PH,ACETONE HIGH PURITY,MX-THINNERS HTS 10208,ACETONE HP,MX-THINNER HTS 10268,ACETONE INDUSTRIAL,ACETONE PHARMA GRADE,ACETONE – HÖGANÄS,ACETONE PHARMA – INV. LACKADE,ACETONE PHARMA,ACETONE,ACETONE NF,ACETONE EP,ACETONE GLD,ACETONE STATOIL
REACH registration number	01-2119471330-49
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	Lab Reagent Industrial Solvent Production of Rubber Oilfields Surface coating Chemical Intermediate Polymers Process Additive Monomer Binder Release Agent Formulation Resin. Cosmetics
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 sds@univar.com +44 1274 267306
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1.4. Emergency telephone number

Emergency Contact Number (Office Hours)	+44 1274 267346
Emergency Contact Number (Outside Office Hours)	+441865 407333
Sds No.	586

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H336

ACETONE

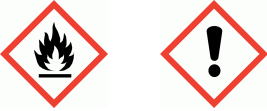
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) F; R11. Xi; R36. R66, R67

2.2. Label elements

EC number 200-662-2

Pictogram



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.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing vapour/spray.
 P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 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.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name ACETONE
REACH registration number 01-2119471330-49
EU index number 606-001-00-8
CAS number 67-64-1
EC number 200-662-2

ACETONE

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Keep the affected person warm and at rest. Get prompt medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
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. Get medical attention immediately. Continue to rinse.

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

Inhalation	Drowsiness, dizziness, disorientation, vertigo. Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	Central nervous system depression.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

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

Notes for the doctor	Treat according to symptoms: No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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	The product is flammable. Heating may generate flammable vapours. Oxides of the following substances: Carbon. CAUTION: Reignition may occur Vapours may form explosive mixtures with air.
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5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No smoking, sparks, flames or other sources of ignition near spillage. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Provide adequate ventilation. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Provide adequate ventilation. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. No smoking, sparks, flames or other sources of ignition near spillage. Stop leak if possible without risk.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Provide adequate ventilation. Vapours may accumulate on the floor and in low-lying areas. Keep away from heat, sparks and open flame. Avoid the formation of mists. Eliminate all sources of ignition. Static electricity and formation of sparks must be prevented. Protect against direct sunlight. Mechanical ventilation or local exhaust ventilation may be required. Use explosion proof electric equipment. Take precautionary measures against static discharge. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from flammable and combustible materials. Earth container and transfer equipment to eliminate sparks from static electricity. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Suitable container materials: Stainless steel. Polyethylene-lined mild steel. Glass.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

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/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

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DNEL	Industry - Dermal; Long term : 186 mg/kg/day
	Industry - Inhalation; Short term : 2420 mg/m ³
	Industry - Inhalation; Long term : 1210 mg/m ³
	Consumer - Oral; Long term : 62 mg/kg/day
	Consumer - Dermal; Long term : 62 mg/kg/day
	Consumer - Inhalation; Long term : 200 mg/m ³

PNEC	- Fresh water; 10.6 mg/l
	- Marine water; 1.06 mg/l
	- water; 21 mg/l
	- Sediment; 3.04 mg/kg
	- Soil; 33.3 mg/l
	- STP; 29.5 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Personal protection

Wear anti-static footwear

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

It is recommended that gloves are made of the following material: Butyl rubber.

Other skin and body protection

Wear rubber apron. Wear rubber footwear.

Hygiene measures

Provide eyewash station. Wash hands after handling. Avoid contact with eyes. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	47.5
pH	pH (diluted solution): 5-6 50
Melting point	-94.7°C
Initial boiling point and range	55.8 - 56.6°C @
Flash point	-17°C CC (Closed cup).
Evaporation rate	0.5 (diethyl ether = 1)
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 2.5 Upper flammable/explosive limit: 14.3
Vapour pressure	24.1 kPa @ °C

ACETONE

Vapour density	2
Relative density	0.79 @ 20°C
Bulk density	0.79 kg/l
Solubility(ies)	Soluble in water.
Partition coefficient	: -0.24
Auto-ignition temperature	465°C
Viscosity	0.32 mPa s @ 20°C

9.2. Other information

Refractive index	1.358 - 1.359
Molecular weight	58.09
Volatile organic compound	This product contains a maximum VOC content of 790 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Forms explosive mixtures with air. Avoid the following conditions: Chlorinated hydrocarbons.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Amines. Strong reducing agents. Alkalis - inorganic. Alkalis - organic.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,800

Species Rat

Notes (oral LD₅₀) OECD 401

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 15,800

ACETONE

Species Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 76

Species Rat

ATE inhalation (vapours mg/l) 76

Inhalation Drowsiness, dizziness, disorientation, vertigo. Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting.

Ingestion May cause nausea, headache, dizziness and intoxication. Gastrointestinal symptoms, including upset stomach. Central nervous system depression.

Skin contact Irritating to skin. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute toxicity - fish LC50, 96 hours, 96 hours: 5540 mg/l, *Onchorhynchus mykiss* (Rainbow trout)
LC50, 96 hours, 96 hours: > 100 mg/l, *Pimephales promelas* (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours, 48 hours: 8800 mg/l, *Daphnia magna*

Acute toxicity - microorganisms , : 1000 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

Biodegradation water - Degradation (%) 91: 28 days
The substance is readily biodegradable.

Chemical oxygen demand 2.21 g O₂/g substance

12.3. Bioaccumulative potential

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

Partition coefficient : -0.24

12.4. Mobility in soil

Mobility The product is soluble in water.

Adsorption/desorption coefficient Soil - : 1.5 @ 20°C

Henry's law constant 3311 Pa m³/mol @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

ACETONE

12.6. Other adverse effects

Other adverse effects No information required.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Materials such as cleaning rags and paper wipes that are contaminated with flammable liquids may self-ignite after use and should be stored in designated fireproof containers with tight-fitting, self-closing lids. Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 1090

UN No. (IMDG) 1090

UN No. (ICAO) 1090

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ACETONE

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 subsidiary risk

ADR/RID label 3

IMDG class 3

IMDG subsidiary risk

ICAO class/division 3

ICAO subsidiary risk

Transport labels

14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-D
Emergency Action Code	•2YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). This product may impact SEVESO storage regulations.
Guidance	CHIP for everyone HSG228. Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. DSEAR
Water hazard classification	WGK 1
Inventory Information	EINECS TSCA MITI DSL

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	18/09/2013
Revision	02
SDS number	586
SDS status	Approved.
Signature	Jitendra Panchal

ACETONE

Risk phrases in full

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

Hazard statements in full

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