

Revision Date 18.09.2013  
Revision 02



## SAFETY DATA SHEET ACETONE

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

#### 1.1. Product identifier

<b>Product name</b>	ACETONE
<b>Product No.</b>	100043, 101644, 101228, 106012, 106561, 300175, 300176, 107224, 107226, 111616, 301246, 301273, 301331
<b>Synonyms, Trade Names</b>	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
<b>REACH Registration number</b>	01-2119471330-49
<b>CAS-No.</b>	67-64-1
<b>EU Index No.</b>	606-001-00-8
<b>EC No.</b>	200-662-2

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

<b>Identified uses</b>	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

<b>Supplier</b>	Univar Aquarius House 6 Midpoint Business Park Thornbury Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com
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#### 1.4. Emergency telephone number

**Emergency Contact Number (Office Hours)**  
+44 1274 267346

## ACETONE

## Emergency Contact Number (Outside Office Hours)

+441865 407333

Finnish only

TOL1: C20, KT1: 48

Sds No. 586

## SECTION 2: HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

## Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	EUH066; Eye Irrit. 2 - H319; STOT SE 3 - H336
Environment	Not classified.

## Classification (67/548/EEC) F;R11 Xi;R36 R66 R67

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## 2.2. Label elements

EC No. 200-662-2

Label In Accordance With (EC) No. 1272/2008



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/sparks/open flames/hot surfaces. - No smoking.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with national regulations.

Supplemental label information

EUH066	Repeated exposure may cause skin dryness or cracking.
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## 2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

# ACETONE

## 3.1. Substances

<b>Product name</b>	ACETONE
<b>REACH Registration number</b>	01-2119471330-49
<b>CAS-No.</b>	67-64-1
<b>EU Index No.</b>	606-001-00-8
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### **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. When risk of unconsciousness, place and transport the victim in secured side position.

#### **Inhalation**

Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention.

#### **Ingestion**

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). 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**

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

#### **Inhalation**

Drowsiness, dizziness, disorientation, vertigo. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

#### **Ingestion**

Central nervous system depression.

#### **Skin contact**

Prolonged contact may cause redness, irritation and dry skin.

#### **Eye contact**

Irritating and may cause redness and pain.

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

Treat according to symptoms: No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **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, and heating may generate vapours which may form explosive vapour/air mixtures. Oxides of: Carbon. CAUTION: Reignition may occur Vapours may form explosive air mixtures even at room temperature.

# ACETONE

## 5.3. Advice for firefighters

### Special Fire Fighting Procedures

Cool containers exposed to flames with water until well after the fire is out.

### Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Do not smoke, use open fire or other sources of ignition. 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

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

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

Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb with inert, damp, non-combustible material, then flush area with water. Ventilate well. Dilute with copious amounts of water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Remove sources of ignition. Stop leak if possible without risk.

### 6.4. 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

Avoid contact with skin and eyes. Provide good ventilation. Risk of vapour concentration on the floor and in low-lying areas. Keep away from heat, sparks and open flame. Avoid forming spray/aerosol 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

Oxidising material - Keep away from flammable and combustible materials. Ground container and transfer equipment to eliminate static electric sparks. Store in tightly closed original container in a dry, cool and well-ventilated place. Suitable containers: stainless steel, polyethylene lined mild steel. Glass.

#### Storage Class

Flammable liquid storage.

### 7.3. 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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ACETONE	WEL	500 ppm	1210 mg/m3	1500 ppm	3620 mg/m3	

WEL = Workplace Exposure Limit.

#### Ingredient Comments

WEL = Workplace Exposure Limits

## ACETONE

### DNEL

Industry	Dermal	Long Term	186	mg/kg/day
Industry	Inhalation.	Short Term	2420	mg/m <sup>3</sup>
Industry	Inhalation.	Long Term	1210	mg/m <sup>3</sup>
Consumer	Oral	Long Term	62	mg/kg/day
Consumer	Dermal	Long Term	62	mg/kg/day
Consumer	Inhalation.	Long Term	200	mg/m <sup>3</sup>

### PNEC

Freshwater	10.6	mg/l
Marinewater	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



#### Process conditions

Provide eyewash station.

#### Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

#### Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with gas filter, type A2.

#### Hand protection

Butyl rubber gloves are recommended.

#### Eye protection

Wear approved safety goggles.

#### Other Protection

Wear rubber apron. Wear rubber footwear.

#### Hygiene measures

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

#### Personal protection

Wear anti-static footwear

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Characteristic.
Solubility	Soluble in water.
Initial boiling point and boiling range (°C)	55.8 - 56.6
Melting point (°C)	-94.7
Relative density	0.79 20
Bulk Density	0.79 kg/l
Vapour density (air=1)	2
Vapour pressure	24.1 kPa 20
Evaporation rate	0.5 (EtEt=1)
pH-Value, Diluted Solution	5-6 50
Viscosity	0.32 mPas 20

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Odour Threshold, Lower	47.5
Flash point (°C)	-17 CC (Closed cup).
Auto Ignition Temperature (°C)	465
Flammability Limit - Lower(%)	2.5
Flammability Limit - Upper(%)	14.3
Partition Coefficient (N-Octanol/Water)	-0.24

## 9.2. Other information

Refractive Index	1.358 - 1.359
Mol. Weight	58.09
Volatile Organic Compound (VOC)	790 g/litre

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific reactivity hazards associated with this product.

### 10.2. Chemical stability

The product may form explosive vapours/air mixtures even at normal room temperatures. Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

### 10.3. Possibility of hazardous reactions

None under normal conditions.

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Forms explosive mixtures with air. Avoid Chlorinated hydrocarbons.

### 10.5. Incompatible materials

#### **Materials To Avoid**

Strong oxidising substances. Amines. Strong reducing agents. Bases, alkalis (inorganic). Bases, alkalis (organic).

### 10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### **Acute toxicity:**

##### **Acute Toxicity (Oral LD50)**

5800 mg/kg Rat

OECD 401

##### **Acute Toxicity (Dermal LD50)**

> 15800 mg/kg Rat

##### **Acute Toxicity (Inhalation LC50)**

76 mg/l (vapours) 4 hours

#### **Inhalation**

Drowsiness, dizziness, disorientation, vertigo. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

# ACETONE

## 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 and may cause redness and pain.

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### 12.1. Toxicity

##### Acute Fish Toxicity

Not considered toxic to fish.

##### Acute Toxicity - Fish

LC50 96 hours 5540 mg/l *Onchorhynchus mykiss* (Rainbow trout)

LC50 96 hours > 100 mg/l *Pimephales promelas* (Fat-head Minnow)

##### Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 8800 mg/l *Daphnia magna*

##### Acute Toxicity - Microorganisms

1000 mg/l Activated sludge

#### 12.2. Persistence and degradability

##### Degradability

The product is easily biodegradable.

##### Biodegradation

Water Degradation (91%) 28 days

The substance is readily biodegradable.

##### Chemical Oxygen Demand

2.21 g O<sub>2</sub>/g substance

#### 12.3. Bioaccumulative potential

##### Bioaccumulative potential

The product is not bioaccumulating.

##### Bioaccumulation factor

BCF 3

Partition coefficient -0.24

#### 12.4. Mobility in soil

##### Mobility:

The product is soluble in water.

##### Adsorption/Desorption Coefficient

Soil 1.5 20C

##### Henry's Law Constant

3311 Pa m<sup>3</sup>/mol 25

#### 12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

#### 12.6. Other adverse effects

No information required.

## SECTION 13: DISPOSAL CONSIDERATIONS

# ACETONE

## General information

Do not puncture or incinerate even when empty. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: TRANSPORT INFORMATION

**General** Full protective clothing should be worn when handling this product.

### 14.1. UN number

Un Number Road	1090
UN No. (IMDG)	1090
UN No. (ICAO)	1090

### 14.2. UN proper shipping name

Proper Shipping Name	ACETONE
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### 14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant  
No.

### 14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	•2YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

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

# ACETONE

No information required.

## SECTION 15: REGULATORY INFORMATION

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

#### Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. DSEAR

#### Guidance Notes

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

#### EU Legislation

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

#### Water hazard classification

WGK 1

### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

#### Inventory Information

EINECS TSCA MITI DSL

## SECTION 16: OTHER INFORMATION

#### Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

<b>Revision Date</b>	18.09.2013
<b>Revision</b>	02
<b>SDS No.</b>	586
<b>Safety Data Sheet Status</b>	Approved.
<b>Date</b>	19.07.2010
<b>Signature</b>	Jitendra Panchal

#### 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

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.