



Trade name: Acetone

Product no.: 000067-64-1

Status: 06.01.2011

Version: 4.0.0 / GB

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

Trade name

Acetone

Product identifier

Substance name acetone
REACH registration no. 01-2119471330-49

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

Relevant identified uses of the substance or mixture

chemical for the automotive industry
paint solvents and thinners
solvent-based adhesives
Intermediate product
pharmaceuticals

Details of the supplier of the safety data sheet

Address

HELM AG
Nordkanalstraße 28
D-20097 Hamburg

Telephone no. +49(0)40 / 2375-0

Fax no. +49(0)40 / 2375-1845

Information provided by / telephone

Telephone: +49(0)40 / 23750 Fax: +49(0)40 / 23751845

Emergency telephone

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

In case of transport incidents and other emergencies (advice in German and English):

+44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

Advice on Safety Data Sheet

SDB@HELMAG.COM

2.) Hazards identification

Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008

EUH066
Eye Irrit. 2; H319
Flam. Liq. 2; H225
STOT SE 3; H336

Classification in accordance with Regulation 67/548/EEC or 1999/45/EC

F; R11
R66
R67
Xi; R36

Label elements

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

Product identifier

606-001-00-8 (acetone)

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.

Hazard statements (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.



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Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use ... for extinction.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to hazardous or special waste collection point.

3.) Composition / information on ingredients**Chemical characterization**

acetone

Substance / product identification

Index no.	606-001-00-8
CAS no.	67-64-1
EC no.	200-662-2

4.) First aid measures**General information**

If the patient is likely to become unconscious, place and transport in stable sideways position. In case of persisting adverse effects, consult a physician.

After inhalation

In the event of symptoms take medical treatment. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off immediately with soap and water.

After eye contact

In case of contact with eyes rinse thoroughly with copious amounts of water and seek medical advice.

After ingestion

Administer activated charcoal. Rinse out mouth and give plenty of water to drink.

Advice to doctor**Symptoms**

The following symptoms may occur: Vomiting; Headache; Dizziness

5.) Fire-fighting measures**Suitable extinguishing media**

Water spray jet; Carbon dioxide; extinguishing powder; Alcohol-resistant foam

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Combustion products of this material have to be classed invariably as respiratory poison. In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO)

Special protective equipment for fire-fighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Wear protective clothing.

Other information

Cool endangered containers with water spray jet. Defeat developing combustible gases with water spray.

6.) Accidental release measures**Personal precautions**

Remove persons to safety. Use personal protective clothing.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Flush away residues with water. Pick up with absorbent material.

7.) Handling and storage**Handling****Advice on safe handling**

Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid formation of aerosols.



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Advice on protection against fire and explosion

Take precautionary measures against static charges. Keep away from sources of ignition - refrain from smoking.

Classification of fires

B

Storage**Advice on storage assembly**

Do not store together with oxidizing agents.

Further information on storage conditions

Storage: cool and dry; Keep container tightly closed.

8.) Exposure controls / personal protection**Exposure limit values****acetone**

CAS no.	67-64-1
EC no.	200-662-2

2000/39/EWG

Acetone

TWA	1210	mg/m ³	500	ml/m ³
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List of approved workplace exposure limits (WELs) / EH40

Acetone

TWA	1810	mg/m ³	500	ml/m ³
STEL	3620	mg/m ³	1500	ml/m ³

Exposure controls**Personal protective equipment****Respiratory protection**

In case of insufficient ventilation or long-term effect use breathing apparatus. Short-term: filter apparatus, filter AX, otherwise environment-independent breathing apparatus.

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl			
Material thickness	0,6	-	0,8	mm
Breakthrough time	>	480		min.

Eye protection

Tightly fitting safety glasses (EN 166).

Skin protection

light protective clothing, anti-static

General protective and hygiene measures

Use barrier skin cream. Wash hands before breaks and after work.

9.) Physical and chemical properties**General information**

Form	liquid
Colour	colourless
Odour	aromatic

Important health, safety and environmental information**Changes in physical state**

Type	Melting point	
Value	-95	°C
Type	Boiling point	
Value	56	°C

Flash point

Value	<	-18	°C
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Ignition temperature

Value	540	°C
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Explosion limits

Upper explosion limit	12,8	% vol
Lower explosion limit	2,2	% vol



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Vapour pressure

Value	240		mbar
Reference temperature	20	°C	

Density

Value	0,79		g/cm ³
Reference temperature	20	°C	

Viscosity

Type	dynamic		
Value	0,316		mPa*s
Reference temperature	25	°C	

Solubility in water

Remarks miscible in all proportions

pH value

Value	5	-	6
Reference temperature	20	°C	

Octanol/water partition coefficient (log Pow)

Value -0,24

10.) Stability and reactivity**Conditions to avoid**

Evolution of highly flammable gases/vapours. Evolution of peroxides.

Materials to avoid

Oxidizing agents

Hazardous decomposition products

Carbon monoxide and carbon dioxide

Thermal decomposition

Remarks No decomposition if used as prescribed.

11.) Toxicological information**Acute toxicity****Acute oral toxicity**

LD50	5800		mg/kg
Species	rat		

Acute dermal toxicity

LD50	> 7400		mg/kg
Species	rat		

Acute inhalational toxicity

LC50	32000		mg/m ³
Duration of exposure	4	h	
Species	rat		

Irritant/corrosive effects**Irritant effect on skin**

Evaluation slightly irritant

Irritant effect on eyes

Evaluation irritant

Experience in practice

Inhalation of vapours may lead to headache, drowsiness and dizziness. Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin. Irritating to eyes.

Other information (chapter 11.)

Exercise customary precautions when handling chemicals.

12.) Ecological information**Ecotoxicity****Fish toxicity**

LC50	11300		mg/l
Species	Leuciscus idus		
Duration of exposure	48	h	
Method	DIN 38412 T.15		

Daphnia toxicity

EC50	10000		mg/l
Species	Daphnia magna		
Duration of exposure	24	h	



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Algae toxicity

NOEC	3400		mg/l
Species	Chlorella pyrenoidosa		
Duration of exposure	48	h	

Bacteria toxicity

EC50	59	- 67,4	mg/l
Species	activated sludge		
Duration of exposure	30	min	

Persistence and degradability**Biodegradability**

Value	84		%
Type	BOD in % of theoretical OD		
Duration of exposure	5	d	
Evaluation	readily degradable		

13.) Disposal considerations**Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

Recommended cleansing agent Water

14.) Transport information**Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	1090
Technical name	ACETONE
Tunnel restriction code	D/E
Label	3

Transport IMDG

Class	3
Packing group	II
UN number	1090
Proper shipping name	ACETONE
EmS	F-E+S-D
Label	3

Transport ICAO/IATA

Class	3
Packing group	II
UN number	1090
Proper shipping name	Acetone
Label	3

15.) Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances**

Remarks Annex I, part 2, category 7 b

National regulations**Germany****Other regulations**

BGI 621 "Merkblatt: Lösemittel"

16.) Other information**Further information**

The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation.

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Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.