


MSDS	Material Safety Data Sheet
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Acetone

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

PRODUCT NAME	Acetone
RECOMMENDED USE & RESTRICTIONS ON USE	Research use only
INFORMATION OF MANUFACTURER/IMPORTER/SUPPLIER	
COMPANY	
ADDRESS	
EMERGENCY PHONE	
E-MAIL ADDRESS	

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Flammable liquids : Category 2 Eye irritation : Category 2 Specific target organ toxicity - single exposure : Category 3	
LABEL ELEMENTS	PICTOGRAM	
	HAZARD SYMBOL	DANGER
	HAZARD STATEMENTS	Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.
	PRECAUTIONARY STATEMENTS	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

		rinsing.
OTHER HAZARDS	none	

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	SYNONYMS	CAS NUMBER	ASSAY
Ethyl ether	Diethyl ether; Ether	60-29-7	Above 99.5%(GR, HPLC); Above 99%(EP)

4. FIRST AID MEASURES

GENERAL ADVICE	Consult a physician. Show this safety data sheet to the doctor in attendance.
IN CASE OF EYE CONTACT	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
IN CASE OF SKIN CONTACT	Wash off with soap and plenty of water. Consult a physician..
IF INHALED	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
IF SWALLOWED	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
SPECIFIC HAZARDS ARISING FROM THE	Carbon oxides

CHEMICAL	
SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:	Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
ENVIRONMENTAL PRECAUTIONS	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
METHODS FOR CLEANING UP	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

7. HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
CONDITIONS FOR SAFE STORAGE	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

APPROPRIATE ENGINEERING CONTROLS:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
INDIVIDUAL PROTECTION	RESPIRATORY PROTECTION	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose

MEASURES		<p>combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).</p>
	EYE PROTECTION	<p>Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).</p>
	SKIN PROTECTION	<p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.</p> <p>Wash and dry hands.</p> <p>The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.</p> <p>Immersion protection Material: butyl-rubber Minimum layer thickness: 0,3 mm Break through time: > 480 min Material tested: Butoject® (Aldrich Z677647, Size M)</p> <p>Splash protection Material: butyl-rubber Minimum layer thickness: 0,3 mm Break through time: > 30 min Material tested: Butoject® (Aldrich Z677647, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374</p> <p>If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and</p>

		must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.
	BODY PROTECTION	impervious clothing, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	FORM	Liquid
	COLOR	Colorless
ODOUR		No data
ODORODOUR THRESHOLD VALUE		No data
pH		No data
FREEZING POINT :		No data
INITIAL BOILING POINT		56 °C at 1.013 hPa - lit.
FLASH POINT		-17,0 °C - closed cup
EVAPORATING RATE		No data
FLAMMABILITY(solid, gas)		No data
EXPLOSIVE LIMITS		Upper explosion limit: 13 %(V) Lower explosion limit: 2 %(V)
VAPOR PRESSURE		533,3 hPa at 39,5 °C 245,3 hPa at 20,0 °C
SOLUBILITY IN	WATER	passes test JIS K 8034
VAPOR DENSITY		No data
RELATIVE DENSITY		No data
PARTITION COEFFICIENT: N-OCTANOL/WATER		log Pow: -0,24
AUTOIGNITION TEMPERATURE		465,0 °C
DECOMPOSITION TEMPERATURE		No data
VISCOSITY		No data

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY & POSSIBILITY OF HAZARDOUS REACTIONS	no data
CONDITIONS TO AVOID	Heat, flames and sparks. Extremes of temperature and direct sunlight.
INCOMPATIBLE MATERIALS	Bases, Oxidizing agents, Reducing agents, Acetone reacts violently with phosphorous oxychloride
HAZARDOUS DECOMPOSITION PRODUCTS	Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

INFORMATION ON THE LIKELY ROUTES OF EXPOSURES:	No data	
HEALTH HAZARD INFORMATION	ACUTE TOXICITY	LD50 Oral - rat - 5.800 mg/kg Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Tremor. LC50 Inhalation - rat - 8 h - 50.100 mg/m3 LD50 Dermal - guinea pig - 7.426 mg/kg
	SKIN CORROSION/ SKIN IRRITATION	Skin - rabbit - Mild skin irritation - 24 h
	EYE DAMAGE/ EYE IRRITATION	Eyes - rabbit - Eye irritation - 24 h
	RESPIRATORY SENSITIZATION	Chronic exposure may cause dermatitis.
	SKIN SENSITIZATION	No data
	CARCINOGENICITY	IARC: No data OSHA: No data

		ACGIH: No data NTP: No data EU CLP: No data
	GERM CELL MUTAGENICITY	No data
	TOXIC TO REPRODUCTION	No data
	SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE	May cause drowsiness or dizziness.
	SPECIFIC TARGET ORGAN TOXICITY REPEATED EXPOSURE	No data
	ASPIRATION HAZARD	No data

12. ECOLOGICAL INFORMATION

ECOTOXICITY	TO FISH	LC50 - Oncorhynchus mykiss (rainbow trout) - 5.540,00 mg/l - 96 h
	TO CRUSTACEA	No data
	TO OTHER AQUATIC LIFE	EC50 - Daphnia magna (Water flea) - 13.500,00 mg/l - 48 h
PERSISTENCE/ DEGRADABILITY	PERSISTENCE	No data
	DEGRADABILITY	No data
BIOACCUMULATION POTENTIAL	ACCUMUKATION	No data
	BIODEGRADABILITY	No data
MOBILITY IN SOIL		No data
OTHER ADVERSE EFFECTS		No data

13. DISPOSAL CONSIDERATION

DISPOSAL METHODS	Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in
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	igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.
DISPOSAL CONSIDERATIONS	No data.

14. TRANSPORT INFORMATION	
IATA	
UN NUMBER	1090
UN PROPER SHIPPING NAME	Acetone
TRANSPORT HAZARD CLASS	3
PACKING GROUP	II
MARINE POLLUTANT	No
SPECIAL PRECAUTIONS FOR USER	

15. REGULATORY INFORMATION	
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.	
Safety, health and environmental regulations/legislation specific for the substance or mixture	No data
Chemical Safety Assessment	No data

16. OTHER INFORMATION	
REFERENCES AND SOURCES FOR DATA	Wako Corporation Sigma Aldrich Corporation
OTHER	The information in this MSDS is based on several references and the present state of our knowledge. However, the MSDS does not always cover all information about product. The information in this MSDS is only provision of information, and It does not represent any guarantee of the properties of the product.

