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Safety data sheet according to 1907/2006/EC, Article 31

revised on: 27.02.2023

Version number 8

Creation Date: 04.01.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking
· 1.1 Product identifier
· Trade name: Acetone
 Article number: 2626, 2628, 2647, 2654, 2659, 2661, 2666, 2676, 2677, 2680, 2693, 2698, 3101 CAS Number: 67-64-1 EC number:
200-662-2 • Index number:
606-001-00-8
 Registration number 01-2119471330-49-XXXX 1.2 Relevant identified uses of the substance or mixture and uses advised against
· Life cycle stages IS Use at industrial Sites
C Consumer use • Sector of Use
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU9 Manufacture of fine chemicals
SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys) SU24 Scientific research and development
· Product category PC19 Intermediate
PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents PC21 Laboratory chemicals
PC29 Pharmaceuticals PC39 Cosmetics, personal care products
PC40 Extraction agents
 Process category PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises
PROC5 Mixing or blending in batch processes
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC15 Use as laboratory reagent
Environmental release category ERC1 Manufacture of the substance
ERC2 Formulation into mixture
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC6a Use of intermediate
· Application of the substance / the mixture
Industrial use Laboratory chemicals
Reagent for analysis
 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:
Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6 D-71272 Renningen
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Trade name: Acetone

Tel.: +49(0)7159-1637-0, Fax:+49 (0)7159/18417 www.thgeyer.de sicherheitsdatenblaetter@thgeyer.de

· Further information obtainable from: Product management department

· 1.4 Emergency telephone number:

National Poisons Information Service City Hospital Dudley Road Birmingham B18 7QH Tel.:Emergency: (00 44) 87 06 00 62 66 Members of the public seeking specific information on poisons should contact: In England and Wales: NHS 111 - dial 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 2 H225 Highly flammable liquid and vapour.

GHS07

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H336 May cause drowsiness or dizziness.

· 2.2 Label elements

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

The substance is classified and labelled according to the GB CLP regulation.

· Hazard pictograms



· 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 and bond container and receiving equipment.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

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- · 2.3 Other hazards
- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description
- CAS: 67-64-1 Acetone
- · Identification number(s)
- · EC number: 200-662-2
- · Index number: 606-001-00-8

SECTION 4: First aid measures

· 4.1 Description of first aid measures General information: Take affected persons out into the fresh air. First aider needs to protect himself. Immediately remove any clothing soiled by the product. After inhalation: Take affected persons into fresh air and keep quiet. Supply fresh air or oxygen; call for doctor. In case of unconsciousness place patient stably in side position for transportation. In case of pulmonary irritation, administer glucocorticoid metered dose inhaler After skin contact: Flush contaminated skijn with soap and plenty of water. Immediately remove any clothing soiled by the product. take care of a Possiblility of inhalation at the same time After prolonged contact or any signs of skin changes (redness or other signs of inflammation) seek medical attention. After eye contact: Protect unharmed eye. Rinse out opened eye for several minutes under running water. Seek immediate medical advice. After swallowing: Rinse mouth thoroughly with water. Make vicitim drink water (two glasses at most). Seek immediate medical advice. A person vomiting while laying on their back should be turned onto their side. · Information for doctor: Please observe safety data sheet/label. · 4.2 Most important symptoms and effects, both acute and delayed Headache Dazed feeling Cramp Vertigo Gastric or intestinal disorders · Hazards Danger of impaired breathing. Danger of disturbed cardiac rhythm. Danger of pulmonary oedema. Risk of organ damage (liver, kidney) Danger of pneumonia. 4.3 Indication of any immediate medical attention and special treatment needed If swallowed or in case of vomiting, danger of entering the lungs. Monitor circulation. (Contd. on page 4)

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Symptomatic treatment.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:
- Water spray, powder, carbon dioxide or foam. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet.
- 5.2 Special hazards arising from the substance or mixture
- Combustible.

In case of fire, the following can be released:

Carbon dioxides (CO, CO)

Forms explosive mixtures with air on intense heating.

Vapours are heavier than air and may spread along floors.

5.3 Advice for firefighters

· Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Particular danger of slipping on leaked/spilled product.
Keep away from ignition sources.
Avoid contact with eyes and skin.
Keep away from ignition sources – No smoking.
Consult an expert.
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:
Danger of explosion.
Do not allow to enter sewers/surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Keep away from heat and direct sunlight.

Use solvent-proof equipment.

Store in cool, dry place in tightly closed receptacles.

Apply the general protection and hygiene measures for the handling with chemicals.

Information about fire - and explosion protection:

Highly volatile, flammable constituents are released during processing.

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Fumes can combine with air to form an explosive mixture. Keep ignition sources away - Do not smoke.	
Protect against electrostatic charges.	
 7.2 Conditions for safe storage, including any incompatibilities Storage: 	
• Requirements to be met by storerooms and receptacles:	
Provide solvent resistant, sealed floor.	
Store in a cool location. Store only in the original receptacle.	
· Information about storage in one common storage facility:	
Store away from flammable substances.	
Store away from oxidising agents.	
 Further information about storage conditions: Caution when reopening receptacles with broken seal. 	
Keep container tightly sealed.	
Store in cool, dry conditions in well sealed receptacles. • Storage class: 3	
• 7.3 Specific end use(s) No further relevant information available.	
SECTION 8: Exposure controls/personal protection	
SECTION 8. Exposure controls/personal protection	
· 8.1 Control parameters	
Ingredients with limit values that require monitoring at the workplace:	
CAS: 67-64-1 Acetone	
WEL Short-term value: 3620 mg/m³, 1500 ppm Long-term value: 1210 mg/m³, 500 ppm	
• Additional information: The lists valid during the making were used as basis.	
· 8.2 Exposure controls	
• Appropriate engineering controls No further data; see item 7.	
Individual protection measures, such as personal protective equipment	
 General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. 	
Immediately remove all soiled and contaminated clothing	
Wash hands before breaks and at the end of work.	
Avoid contact with the eyes. Avoid contact with the eyes and skin.	
• Respiratory protection: Not necessary if room is well-ventilated.	
Hand protection	
Solvent resistant gloves	
Protective gloves	
The glove material has to be impermeable and resistant to the product/ the substance/ the prepara	
Selection of the glove material on consideration of the penetration times, rates of diffusion and the • Material of gloves	degradation
Butyl rubber, BR	
The selection of the suitable gloves does not only depend on the material, but also on further marl	ks of quality
and varies from manufacturer to manufacturer.	
 Penetration time of glove material level 6 for application > 480 min 	
The exact break through time has to be found out by the manufacturer of the protective gloves and	d has to be
observed.	Contd on page 6)
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· Eye/face protection



Tightly sealed goggles

· Body protection:



Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

SECTION 9: Physical and chemical proper	rties
• 9.1 Information on basic physical and chemical pro	operties
· General Information	
· Physical state	Fluid
· Colour:	Colourless
· Odour:	Characteristic
· Melting point/freezing point:	-94.7 °C
· Boiling point or initial boiling point and boiling	
range	55.8–56.6 °C
· Flammability	Highly flammable.
Lower and upper explosion limit	
· Lower:	2.6 Vol %
· Upper:	13 Vol %
Flash point:	<-18 °C
Ignition temperature:	465 °C
Decomposition temperature:	Not determined.
· pH	5
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	32 mPas
· Solubility	
· water:	Not miscible or difficult to mix.
 Partition coefficient n-octanol/water (log value) 	Not determined.
 Vapour pressure at 20 °C: 	233 hPa
Density and/or relative density	
· Density at 20 °C:	~0.79 g/cm³
	Not determined.
· Relative density	Not determined.
· Vapour density	Not determined.
• 9.2 Other information	
· Appearance:	
Form:	Fluid
· Important information on protection of health and	
environment, and on safety.	
Auto-ignition temperature:	527,5 °C
· Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
· Molecular weight	58.01 g/mol
· Change in condition	
· Evaporation rate	Not determined.
Information with regard to physical hazard classes	
· Explosives	Void
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Flammable gases	Void	
Aerosols	Void	
Oxidising gases	Void	
Gases under pressure	Void	
Flammable liquids	Highly flammable liquid and vapour.	
Flammable solids	Void	
Self-reactive substances and mixtures	Void	
Pyrophoric liquids	Void	
Pyrophoric solids	Void	
Self-heating substances and mixtures	Void	
Substances and mixtures, which emit flammable		
gases in contact with water	Void	
Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
Corrosive to metals	Void	
Desensitised explosives	Void	

SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

• 10.2 Chemical stability Stable with proper storage and handling.

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Reacts with oxidising agents.

Forms explosive gas mixture with air.

• 10.4 Conditions to avoid Heat, flames and sparks

• 10.5 Incompatible materials: Avoid contact with other chemicals.

10.6 Hazardous decomposition products: On fire: see chapter 5

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

Oral LD50 5,800 mg/kg (rat)

Dermal LD50 20,000 mg/kg (rabbit)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation Causes serious eye irritation.

· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.

• **Reproductive toxicity** Based on available data, the classification criteria are not met.

• STOT-single exposure May cause drowsiness or dizziness.

• **STOT-repeated exposure** Based on available data, the classification criteria are not met.

• Aspiration hazard Based on available data, the classification criteria are not met.

Subacute to chronic toxicity: -

11.2 Information on other hazards

· Endocrine disrupting properties Substance is not listed.

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SECTION 12: Ecological information

· 12.1 Toxicity

- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

Observe local (country-specific) regulations and laws

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Chemicals must be disposed of in compliance with the respective national regulations.

• European waste catalogue

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES	
07 01 00	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals	
07 01 04*	other organic solvents, washing liquids and mother liquors	
HP3	Flammable	
HP4	Irritant - skin irritation and eye damage	
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity	

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information	1	
 14.1 UN number or ID number ADR, IMDG, IATA 	UN1090	
 14.2 UN proper shipping name ADR IMDG, IATA 	1090 ACETONE ACETONE	
· 14.3 Transport hazard class(es)		
ADR		
Class	3 (F1) Flammable liquids.	
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Label	3
IMDG, IATA	
Class	3 Flammable liquids.
Label	3
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemler code):	33
EMS Number:	F-E,S-D
Stowage Category	E
14.7 Maritime transport in bulk according to IM instruments	IO Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category	
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1090 ACETONE, 3, II

SECTION 15: Regulatory information

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

Inventory of Hazardous Chemicals

CAS: 67-64-1 Acetone

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II
- Substance is not listed.
- · REGULATION (EU) 2019/1148
- Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

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(Contd. of page 9) Annex II - REPORTABLE EXPLOSIVES PRECURSORS Substance is listed. Regulation (EC) No 273/2004 on drug precursors 3 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors 3 National regulations: Information about limitation of use:
Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed. • 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.
SECTION 16: Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Application, use and handling of our products take place out of our control and are solely your responsibility.
 Department issuing SDS: Product management Contact: Product management Abbreviations and acronyms: ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Maritime Code for Dangerous Goods ICS0: Lethal concentration, 50 percent ID50: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic VPWB: very Persistent and very Bioaccumulative IFam. Liq

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Annex: Exposure scenario

• Short title of the exposure scenario Chemicals for Laboratory and industrial use Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU9 Manufacture of fine chemicals SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys) SU24 Scientific research and development Product category PC19 Intermediate PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents PC21 Laboratory chemicals PC29 Pharmaceuticals PC39 Cosmetics, personal care products PC40 Extraction agents Process category PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition PROC4 Chemical production where opportunity for exposure arises PROC5 Mixing or blending in batch processes PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC15 Use as laboratory reagent · Environmental release category ERC1 Manufacture of the substance ERC2 Formulation into mixture ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article) ERC6a Use of intermediate · Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet. · Conditions of use Customary application according to section 1. • Duration and frequency 5 workdays/week. • Environment The product must not enter the sewage system or the aquatic environment. · Physical parameters · Physical state Fluid · Concentration of the substance in the mixture Raw material. • Other operational conditions Observe the general safety regulations when handling chemicals. · Other operational conditions affecting environmental exposure Observe section 6 of the Safety Data Sheet (Accidental release measures). Other operational conditions affecting worker exposure Avoid contact with eyes. Take precautionary measures against static discharge. Keep away from sources of ignition - No smoking. Do not breathe gas/vapour/aerosol. • Other operational conditions affecting consumer exposure Keep out of the reach of children. • Other operational conditions affecting consumer exposure during the use of the product Not applicable. · Risk management measures · Worker protection · Organisational protective measures Consider section 4 of the Safety Data Sheet (First aid measures). Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed. Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

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Provide Internal Plant Instruction.
 Technical protective measures
Provide explosion-proof electrical equipment.
Ensure that suitable extractors are available on processing machines
· Personal protective measures
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Tightly sealed goggles
Solvent resistant gloves
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Measures for consumer protection
Ensure adequate labelling.
Keep locked up and out of the reach of children.
· Environmental protection measures
• Water Do not allow to reach ground water, water bodies or sewage system.
· Soil Prevent contamination of soil.
 Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.
[.] Disposal measures
Disposal must be made according to official regulations.
Ensure that waste is collected and contained.
· Disposal procedures
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 Waste type Partially emptied and uncleaned packaging
· Exposure estimation
 Worker (oral) Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.
• Worker (dermal) Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.
· Worker (inhalation) Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.
Environment
Detailed information on the estimation of the environmental exposure can be found at http://
ecb.jrc.ec.europa.eu/euses/.
Consumer Not relevant for this Exposure Scenario.
Guidance for downstream users No further relevant information available.