

Safety data sheet

according to Regulation (EC) No. 1907/2006 as amended from
time to time

Printing date 11.04.2023



Version-No. 8 (replaces version 7)

Revision: 11.04.2023

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

- **1.1. Product identifier**
- Trade name / Article-No: **KLEIBERIT 823.0**
- UFI: Q9D0-J0FU-T00R-EW0C
- **1.2. Relevant identified uses of the substance / mixture or uses advised against**
For professional users only.
- **Application of the substance / the mixture** Adhesives
- **1.3. Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
KLEIBERIT SE & Co. KG
Max-Becker-Str. 4
76356 Weingarten
Germany
- **Further information obtainable from:**
phone: +49 (0) 7244 62-0
FAX: +49 (0) 7244 700-0
E-Mail: hse@kleiberit.com
- **1.4. Emergency telephone number:**
+44 1235 239670 European regional number (European languages)
112 Emergency telephone number for Malta
543 22 22 Icelandic University Hospital

SECTION 2: Hazards identification

- **2.1. Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008 - GHS/CLP**
Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
- **2.2. Label elements**
- **Hazard pictograms**
 
GHS02 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
acetone
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.

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EU

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- P251 Do not pierce or burn, even after use.
- P260 Do not breathe mist/vapours/spray.
- P280 Wear protective gloves / eye protection.
- 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.
- P314 Get medical advice/attention if you feel unwell.
- P410 Protect from sunlight.
- P412 Do not expose to temperatures exceeding 50 °C/122 °F.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Registry-No's	Identification / Classification GHS-CLP	%
CAS: 67-64-1 Reg.nr.: 01-2119471330-49-XXXX	acetone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	70-80%
CAS: 75-28-5	isobutane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-20%
CAS: 74-98-6	propane Flam. Gas 1A, H220; Press. Gas (Comp.), H280	≤3%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Call for a doctor immediately.

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

Headache
Drowsiness
Dizziness
Nausea

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

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1. Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. 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** No further relevant information available.
- **5.3. Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
- **6.2. Environmental precautions:** Prevent seepage into sewage system, workpits and cellars.
- **6.3. Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **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**
Appropriate regular employee training.
Handle the substance preferably in closed system
Enclosure or extractor facilities are required.
Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the vapour concentration below the workplace limit, wear an adequate respiratory protective device.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Conduct spray applications in a ventilated booth or in an exhausted enclosure. Or as an alternative, ensure an adequate level of controlled ventilation (10 to 15 air changes per hour) and wear a respiratory protective device according to EN140 with filter type AX or better.
additional to professional application with multiple and/or significant contact
limit the exposure to 1 hour
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray onto a naked flame or any incandescent material.
- **General protective and hygienic measures:** Keep good industrial hygiene.
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Store outdoors.
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Observe the national regulations.
- **Further information about storage conditions:** Do not seal receptacle gas tight.
- **7.3. Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 8.1. Control parameters

· Ingredients with limit values that require monitoring at the workplace:

· DNELs

67-64-1 acetone

Dermal DNEL long term 186 mg/kg (human being)

Inhalative DNEL short term 2,420 mg/m³ (human being)DNEL long term 1,210 mg/m³ (human being)

· PNECs

67-64-1 acetone

PNEC- Freshwater 10.6 mg/l (not specified)

PNEC-seawater 1.06 mg/l (not specified)

PNEC-Freshwater sediment 30.4 mg/kg (not specified)

PNEC-Seawater sediment 3.04 mg/kg (not specified)

PNEC-soil 29.5 mg/kg (not specified)

PNEC-wastewater treatment plant 100 mg/l (not specified)

· Ingredients with biological limit values:

67-64-1 acetone

BGW (Germany) 80 mg/l

Untersuchungsmaterial: Urin

Probennahmezeitpunkt: Expositionsende bzw. Schichtende

Parameter: Aceton

CAS No.	Designation of material	%	Type	Value	Unit
67-64-1 acetone					
IOELV (INT)	Long-term value:	1210 mg/m ³ ,	500 ppm		
AGW (Germany)	Long-term value:	1200 mg/m ³ ,	500 ppm		
		2(I);AGS, DFG, EU, Y			
75-28-5 isobutane					
AGW (Germany)	Long-term value:	2400 mg/m ³ ,	1000 ppm		
		4(II);DFG			
74-98-6 propane					
AGW (Germany)	Long-term value:	1800 mg/m ³ ,	1000 ppm		
		4(II);DFG			

67-64-1 acetone

IOELV (INT) Long-term value: 1210 mg/m³, 500 ppmAGW (Germany) Long-term value: 1200 mg/m³, 500 ppm
2(I);AGS, DFG, EU, Y

75-28-5 isobutane

AGW (Germany) Long-term value: 2400 mg/m³, 1000 ppm
4(II);DFG

74-98-6 propane

AGW (Germany) Long-term value: 1800 mg/m³, 1000 ppm
4(II);DFG

· 8.2. Exposure controls

limit the exposure to:

8 hours

· Appropriate engineering controls

No further data; see item 7.

· Individual protection measures, such as personal protective equipment

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

· Respiratory protection:

Organic gases/vapors (boiling point <'less than' 149 °F/65 °C): eg.

¹ (F)OV - (Full Facepiece) Organic Vapor Respirator² **Europe:** EN 371 Filtertype AX, brown

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- **Hand protection**
Protective gloves
After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves**
D butyl rubber - BR: ChemTek™ (0,7 mm)
F Natural rubber - NR: Extra™ (0.5 mm)
G Chloroprene rubber - CR: Neotop® (0.75 mm)
H Polyvinyl chloride - PVC: Snorkel® (0.5 mm)
- **Eye/face protection** Safety glasses
- **Body protection:** Protective work clothing
- **Environmental exposure controls**
Waste air is to be released into the atmosphere only via suitable separators.

SECTION 9: Physical and chemical properties

- **9.1. Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Aerosol
- **Colour:** According to product specification
- **Odour:** Acetone-like
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** 55 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** 1.8 Vol %
- **Upper:** 13 Vol %
- **Flash point:** -19 °C
- **Auto-ignition temperature:** 460 °C
- **Decomposition temperature:** Not determined.
- **pH** Not determined.
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **Dynamic:** Not determined.
- **Solubility**
- **water:** Not miscible or difficult to mix.
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure at 20 °C:** 3,000 hPa
- **Density and/or relative density**
- **Density at 20 °C:** ca. 0.79 g/cm³
- **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.**
- **Ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Not determined.
- **Change in condition**
- **Evaporation rate** Not applicable.
- **Information with regard to physical hazard classes**
- **Explosives** Void

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· Flammable gases	Void
· Aerosols	Extremely flammable aerosol. Pressurised container: May burst if heated.
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· 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**
see item 10.3
No further relevant information available.
- **10.2. Chemical stability** Stable when stored and used properly.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3. Possibility of hazardous reactions** No dangerous reactions known.
- **10.4. Conditions to avoid** No further relevant information available.
- **10.5. Incompatible materials:** No further relevant information available.
- **10.6. Hazardous decomposition products:** No dangerous decomposition products known.

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:**

67-64-1 acetone

Oral	LD ₅₀	5,800 mg/kg (rat)
Dermal	LD ₅₀	20,000 mg/kg (rabbit)
		15,800 mg/kg (rat)

Inhalative LC₅₀ /4 h 76 mg/l (rat)
- **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.

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- **11.2 Information on other hazards**
- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1. Toxicity**
- **Aquatic toxicity:**

67-64-1 acetone

LC₅₀ 8,120 mg / l / 96h (fish)LC₅₀ 12,600 mg / l / 48h (water flea - daphnia)EC₅₀ 3,400 mg / l / 48h (algae)

12,100 mg / l / 48h (water flea - daphnia)

- **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**

- **Behaviour in sewage processing plants:**

- **Remark:**

At correct sewage disposal in small quantities to biological sewage plants failures of the activated sludge are not expected.

- **Additional ecological information:**

- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1. Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- **European waste catalogue**

16 05 05 gases in pressure containers other than those mentioned in 16 05 04

15 01 04 metallic packaging

- **Uncleaned packaging:**

- **Recommendation:**

Non contaminated packagings may be recycled.

Empty contaminated packagings thoroughly. Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1. UN number or ID number**

- **ADR, IMDG, IATA**

UN1950

- **14.2. UN proper shipping name**

- **DOT**

Aerosols

- **ADR**

1950 AEROSOLS

- **IMDG**

AEROSOLS

- **IATA**

AEROSOLS, flammable

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· 14.3. Transport hazard class(es)	
· Class	2 5F Gases.
· Label	2.1
· Class	2.1 Gases.
· Label	2.1
· 14.4. Packing group	
· ADR, IMDG, IATA	Void
· 14.5. Environmental hazards:	Not applicable.
· 14.6. Special precautions for user	Warning: Gases.
· Hazard identification number (Kemler code):	-
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· 14.7. Maritime transport in bulk according to IMO instruments	Not applicable.
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	B1D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity

SECTION 15: Regulatory information

- **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
See position no 2 - Hazards Identification
- **Directive 2012/18/EU - Seveso-III:**
- **Named dangerous substances - ANNEX I** None of the ingredients is included.
- **Seveso category** P3a FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **Regulation (EC) No 1907/2006 - REACH, ANNEX XVII** Conditions of restriction: 3
- **Regulation (EU) No 649/2012**

None of the ingredients is listed.

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

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- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
- None of the ingredients is listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**
- 67-64-1 acetone
- **Regulation (EC) No 273/2004 on drug precursors**
- 67-64-1 acetone: 3
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
- 67-64-1 acetone: 3
- **National regulations:**
- **D: Waterhazard class** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **Other regulations, limitations and prohibitive regulations:** Restricted to professional users.
- **VOC - 2010/75/EU [g/L]:** 790.0 g/l
- **VOC - 2010/75/EU [%]:** 100.00 %
- **15.2. Chemical safety assessment:** A Chemical Safety Assessment has not 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.

· Relevant phrases

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- EUH066 Repeated exposure may cause skin dryness or cracking.

· **Department issuing SDS:** Safety & Environment

· **Version number of previous version:** 7

· 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
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Flam. Gas 1A: Flammable gases – Category 1A
- Aerosol 1: Aerosols – Category 1
- Press. Gas (Comp.): Gases under pressure – Compressed gas
- Flam. Liq. 2: Flammable liquids – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3