

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

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

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

1.1. Product identifier

Trade name / Article-No: **KLEIBERIT 304.3**

UFI: 6Q62-20XP-100W-15UR

1.2. Relevant identified uses of the substance / mixture or uses advised against
Restricted to professional users.

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

D - 76356 Weingarten / Baden

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)

+44 1235 239671

Middle Eastern/African regional number (Middle Eastern/African languages)

+1 215 207 0061

Americas regional number (English, Spanish, Portuguese)

+65 3158 1412

Asia Pacific regional number (English, Bahasa, Malaysia, Hindi, Japanese, Korean, Mandarin, Tagalog)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 - GHS/CLP

Met. Corr. 1 H290 May be corrosive to metals.

Skin Corr. 1 H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

2.2. Label elements

Hazard pictograms



GHS05

Signal word Danger

Hazard-determining components of labelling:

aluminum chloride, basic

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

(Contd. on page 2)

-INT

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: **KLEIBERIT 304.3**

(Contd. of page 1)

Precautionary statements

- P260 Do not breathe mist/vapours/spray.
- P280 Wear protective gloves / eye protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- 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.

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: 1327-41-9	aluminum chloride, basic	20-30%
Reg.nr.: 01-2119531563-43-XXXX	Met. Corr.1, H290; Eye Dam. 1, H318	

- **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

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Call for a doctor immediately.
Rinse out mouth and then drink plenty of water.
- **4.2. Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3. Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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.
- **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.
Particular danger of slipping on leaked/spilled product.
- **6.2. Environmental precautions:** Dilute with plenty of water.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: KLEIBERIT 304.3

(Contd. of page 2)

- **6.3. Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
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**
Wear protective gloves/protective clothing/eye protection/face protection.
Application temperature is not higher than 20°C above the surrounding temperature
additional to professional application with multiple and/or significant contact
limit the exposure to 1 hour
- **General protective and hygienic measures:**
Appropriate regular employee training.
Keep good industrial hygiene.
- **7.2. Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Keep container tightly closed.
- **Information about storage in one common storage facility:** Observe the national regulations.
- **Further information about storage conditions:** None.
- **7.3. Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **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:** Not necessary if room is well-ventilated.
- **Hand protection** Protective gloves
- **Material of gloves** Synthetic rubber gloves
- **Eye/face protection** Face protection
- **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- **9.1. Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Colourless
- **Odour:** Chlorine-like
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** 0 °C
- **Boiling point or initial boiling point and boiling range** >100 °C
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: KLEIBERIT **304.3**

(Contd. of page 3)

· Flash point:	Not applicable.
· Auto-ignition temperature:	Product is not selfigniting.
· Decomposition temperature:	Not determined.
· pH at 20 °C	1
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic at 20 °C:	ca. 50 mPas
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	23 hPa
· Density and/or relative density	
· Density at 20 °C:	ca. 1.3 g/cm ³
· 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:	Not applicable.
· Explosive properties:	Product does not present an explosion hazard.
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· 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	May be corrosive to metals.
· 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.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: **KLEIBERIT 304.3**

(Contd. of page 4)

- **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:**
 - 1327-41-9 aluminum chloride, basic**
 - Oral LD₅₀ >2,000 mg/kg (rat)
 - Dermal LD₅₀ >2,000 mg/kg (rat)
 - **Skin corrosion/irritation** Causes severe skin burns and eye damage.
 - **Serious eye damage/irritation** Causes serious eye damage.
 - **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** Based on available data, the classification criteria are not met.
 - **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.
 - **11.2 Information on other hazards**
 - **Endocrine disrupting properties**
- None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1. Toxicity**
- **Aquatic toxicity:**
 - 1327-41-9 aluminum chloride, basic**
 - LC₅₀ 142 mg / l / 96h (Zebrafish - Danio rerio)
 - EC₅₀ >200 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.
- **12.6. 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:**
- Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

(Contd. on page 6)

INT

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: **KLEIBERIT 304.3**

(Contd. of page 5)

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.
- **European waste catalogue**
06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|--|--|
| · 14.1. UN number or ID number | UN2581 |
| · ADR, IMDG, IATA | |
| · 14.2. UN proper shipping name | |
| · DOT | Aluminum chloride, solution |
| · ADR | 2581 ALUMINIUM CHLORIDE SOLUTION |
| · IMDG, IATA | ALUMINIUM CHLORIDE SOLUTION |
| · 14.3. Transport hazard class(es) | |
| · Class | 8 Corrosive substances. |
| · Label | 8 |
| · 14.4. Packing group | |
| · ADR, IMDG, IATA | III |
| · 14.5. Environmental hazards: | Not applicable. |
| · 14.6. Special precautions for user | Warning: Corrosive substances. |
| · Hazard identification number (Kemler code): | 80 |
| · EMS Number: | F-A,S-B |
| · Segregation groups | Acids |
| · Stowage Category | A |
| · 14.7. Maritime transport in bulk according to IMO instruments | Not applicable. |
| · ADR | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml |
| · Transport category | 3 |
| · Tunnel restriction code | E |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml |

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.
- **Regulation (EC) No 1907/2006 - REACH, ANNEX XVII** Conditions of restriction: 3

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 09.03.2021

Version-No. 8

Revision: 09.03.2021

Trade name / Article-No: KLEIBERIT 304.3

(Contd. of page 6)

- **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.

- **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**

None of the ingredients is listed.

- **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.

- **National Regulations (others than Germany or EU)**

- **French Regulation (Decree No. 2011-321):** class A+

- **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**

H290 May be corrosive to metals.

H318 Causes serious eye damage.

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

- **Version number of previous version:** 1

- **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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr.1: Corrosive to metals – Category 1

Skin Corr. 1: Skin corrosion/irritation – Category 1

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

INT