



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

Printing date 06.09.2022

Version-No. 4 (replaces version 3)

Revision: 06.09.2022

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

- **1.1. Product identifier**
- Trade name / Article-No: **KLEIBERIT 549.1**
- **Component:** A
- **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  
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)  
**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**  
The product is not classified as hazardous to health or environment according to the CLP regulation.
- **2.2. Label elements**
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**  
Safety data sheet available on request.  
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **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.

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**Dangerous components:**

Registry-No's	Identification / Classification GHS-CLP	%
CAS: 25322-68-3	polyethylene glycol substance with a Community workplace exposure limit	3-5%
CAS: 107-21-1 Reg.nr.: 01-2119456816-28-XXXX	ethanediol STOT RE 2, H373; Acute Tox. 4, H302	3-5%

**Additional information:**

Titanium dioxide is not present as a powder and is inseparably bound in the product.  
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:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Call for a doctor immediately.
- **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:**  
CO<sub>2</sub>, 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**  
Particular danger of slipping on leaked/spilled product.
- **6.2. Environmental precautions:** Do not allow to enter 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).
- **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.

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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.

regular check up, maintenance and cleaning of equipment and machines

Application temperature is not higher than 20°C above the surrounding temperature

Use drum pumps or pour from the container carefully

if possible use tools with long handles

Do not allow to reach ground water, water bodies or sewage system.

Clean the pipe before decoupling

· **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:** 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

· **8.1. Control parameters**

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

· **DNELs**

**107-21-1 ethanediol**

Dermal DNEL long term 106 mg/kg (human being)

Inhalative DNEL long term 35 mg/m<sup>3</sup> (human being)

· **PNECs**

**107-21-1 ethanediol**

PNEC- Freshwater 10 mg/l (not specified)

PNEC-seawater 1 mg/l (not specified)

PNEC-periodic release 10 mg/l (not specified)

PNEC-Freshwater sediment 37 mg/kg (not specified)

PNEC-Seawater sediment 3.7 mg/kg (not specified)

PNEC-soil 1.53 mg/kg (not specified)

PNEC-wastewater treatment plant 199.5 mg/l (not specified)

· **CAS No. Designation of material % Type Value Unit**

**25322-68-3 polyethylene glycol**

AGW (Germany) Long-term value: 200 E mg/m<sup>3</sup>

2(II);DFG, Y

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**107-21-1 ethanediol**

IOELV (INT) Short-term value: 104 mg/m<sup>3</sup>, 40 ppm  
Long-term value: 52 mg/m<sup>3</sup>, 20 ppm  
Skin

AGW (Germany) Long-term value: 26 mg/m<sup>3</sup>, 10 ppm  
2(l);DFG, EU, H, Y, 11

**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** Safety glasses

- **Body protection:** Protective work clothing

- **Environmental exposure controls**

Ensure that all wastewater is collected and treated in a wastewater treatment plant.

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**

Fluid

- **Colour:**

White

- **Odour:**

Weak, characteristic

- **Odour threshold:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **Boiling point or initial boiling point and boiling range**

&gt;100 °C

- **Flammability**

Not applicable.

- **Lower and upper explosion limit**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Flash point:**

&gt;140 °C

- **Ignition temperature:**

Not applicable.

- **Decomposition temperature:**

Not determined.

- **pH**

Not determined.

- **Viscosity:**

- **Kinematic viscosity**

Not determined.

- **Dynamic at 20 °C:**

2,500 mPas

- **Solubility**

- **water:**

Not miscible or difficult to mix.

- **Partition coefficient n-octanol/water (log value)**

Not determined.

- **Vapour pressure:**

Not determined.

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· Density and/or relative density	
· Density at 20 °C:	ca. 1.09 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2. Other information	
· Appearance:	
· Form:	Liquid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· 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	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.

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**LD/LC<sub>50</sub> values relevant for classification:**
**25322-68-3 polyethylene glycol**
Oral LD<sub>50</sub> >15,000 mg/kg (rat)Dermal LD<sub>50</sub> >20,000 mg/kg (rabbit)  
>2,000 mg/kg (rat)
**107-21-1 ethanediol**
Oral LD<sub>50</sub> 500 mg/kg (ATE)Dermal LD<sub>50</sub> >3,500 mg/kg (mouse)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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:**
**25322-68-3 polyethylene glycol**
LC<sub>50</sub> >100 mg / l / 96h (fish)LC<sub>50</sub> >10,000 mg / l / 48h (water flea - daphnia)EC<sub>50</sub> >100 mg / l / 48h (water flea - daphnia)EC<sub>50</sub> >100 mg / l / 72h (algae)
**107-21-1 ethanediol**
LC<sub>50</sub> 72,860 mg / l / 96h (fish)EC<sub>50</sub> >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.

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- **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:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Danger to drinking water if even small quantities leak into the ground.  
Do not allow product to reach sewage system or any water course.

### 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**  
08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09
- **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** Void
- **14.2. UN proper shipping name**
- **DOT, ADR, IMDG, IATA** Void
- **14.3. Transport hazard class(es)**
- **Class** Void
- **14.4. Packing group**
- **ADR, IMDG, IATA** Void
- **14.5. Environmental hazards:** Not applicable.
- **14.6. Special precautions for user** Not applicable.
- **14.7. Maritime transport in bulk according to IMO instruments** Not applicable.

### 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
- **Regulation (EU) No 649/2012**  
  
None of the ingredients is listed.

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- **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.

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **National regulations:**

- **D: Waterhazard class** Water hazard class 2 (Self-assessment): hazardous for water.

- **VOC - 2010/75/EU [g/L]:** <3.0 g/l

- **VOC - 2010/75/EU [%]:** <0.50 %

- **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**

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

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

- **Version number of previous version:** 3

- **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

Acute Tox. 4: Acute toxicity – Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2