

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.11.2022

Version-No. 5 (replaces version 4)

Revision: 03.11.2022

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

- **1.1. Product identifier**
- **Trade name / Article-No: KLEIBERIT 601.2**
- **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)

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.
Contains trimethoxyvinylsilane, dioctyltin acetylacetonate. May produce an allergic reaction.
- **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: 2768-02-7	trimethoxyvinylsilane	≥1-<2%
Reg.nr.: 01-2119513215-52-XXXX	Flam. Liq. 2, H225; Acute Tox. 4, H332; Skin Sens. 1B, H317	
CAS: 52829-07-9	bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	≥0.25-<1%
	Repr. 2, H361f; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411	

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CAS: 54068-28-9

dioctyltin acetylacetonate

≥0.1-<0.5%

Reg.nr.: 01-0000020199-67-XXXX STOT SE 2, H371; Skin Sens. 1, H317

Additional information:

Trimethoxyvinylsilane (CAS: 2768-02-7) is classified as Skin Sens. 1B, H317 according to Annex VI of Regulation (EC) No 1772/2008 based on vivo data in laboratory animals. Mixtures with up to 5% active substance in polymers of different viscosities up to 60 mPas were examined in the "Local Lymph node assay" (OECD 429). None of these mixtures showed a sensitizing potential. Due to these results and the comparable composition, the classification and labeling with Skin Sens. 1B, H317 can be omitted for this product.

Product hydrolyzes under formation of methanol (CAS No. 67-56-1).

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; 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.
- **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:**

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**

Particular danger of slipping on leaked/spilled product.

6.2. Environmental precautions: No special measures required.**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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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.

Not less than 3-5 air exchanges per hour

Wear protective gloves/protective clothing/eye protection/face protection.

Use only in well ventilated areas.

Perform spray applications in automated and closed systems.

Use at room temperature

additional to professional application with multiple and/or significant contact

limit the exposure to 4 hours

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

· **General protective and hygienic measures:**

Avoid contact with the skin.

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:** Protect from humidity and water.

· **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**

2768-02-7 trimethoxyvinylsilane

Dermal DNEL 0.69 mg/kg (human being)

Inhalative DNEL 4.9 mg/m³ (human being)

52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

Dermal DNEL long term 1.6 mg/kg (human being)

Inhalative DNEL short term 2.82 mg/m³ (human being)

DNEL long term 2.82 mg/m³ (human being)

· **PNECs**

2768-02-7 trimethoxyvinylsilane

PNEC- Freshwater 0.36 mg/l (not specified)

PNEC-seawater 0.036 mg/l (not specified)

PNEC-periodic release 3.4 mg/l (not specified)

PNEC-Freshwater sediment 0.29 mg/kg (not specified)

PNEC-soil 0.048 mg/kg (not specified)

PNEC-wastewater treatment plant 110 mg/l (not specified)

52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate

PNEC- Freshwater 0.018 mg/l (not specified)

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PNEC-seawater	0.0018 mg/l (not specified)
PNEC-periodic release	0.007 mg/l (not specified)
PNEC-Freshwater sediment	29 mg/kg (not specified)
PNEC-Seawater sediment	2.9 mg/kg (not specified)
PNEC-soil	5.9 mg/kg (not specified)
PNEC-wastewater treatment plant	1 mg/l (not specified)

8.2. Exposure controls

limit the exposure to:

8 hours

additional to professional application with multiple and/or significant contact

limit the exposure to 4 hours

Ensure that activities are executed by specialists or authorised personnel only.

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.

Filter ABEK (DIN EN 14 387)

At spray application respiratory protection must be worn.

Hand protection

Protective gloves

Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.

Material of gloves Synthetic rubber gloves

Eye/face protection Goggles recommended during refilling

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:

White

Odour:

Mild

Odour threshold:

Not determined.

Melting point/freezing point:

Undetermined.

Boiling point or initial boiling point and boiling range

346 °C

Flammability

Not applicable.

Lower and upper explosion limit
Lower:

Not determined.

Upper:

Not determined.

Flash point:

Not applicable.

Ignition temperature:

390 °C

Decomposition temperature:

Not determined.

pH

Not determined.

Viscosity:
Kinematic viscosity

Not determined.

Dynamic:

Not determined

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· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20 °C:	ca. 1.58 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· 9.2. Other information	
· Appearance:	
· Form:	Pasty
· 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 Product hydrolyzes under formation of methanol (CAS No. 67-56-1).
- 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 humidity
- 10.5. Incompatible materials: No further relevant information available.
- 10.6. Hazardous decomposition products: Methanol - On reaction with water or air humidity

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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:****2768-02-7 trimethoxyvinylsilane**Oral LD₅₀ 7,120-7,236 mg/kg (rat) (OECD 401)Dermal LD₅₀ 3,200 mg/kg (rabbit) (OECD 402)Inhalative LC₅₀ /4 h 16.8 mg/l (rat) (OECD 403)**52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate**Oral LD₅₀ >2,000 mg/kg (rat)Dermal LD₅₀ >2,000 mg/kg (rat)**54068-28-9 dioctyltin acetylacetonate**Oral LD₅₀ 2,500 mg/kg (rat)Dermal LD₅₀ >2,000 mg/kg (rat)· **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:****2768-02-7 trimethoxyvinylsilane**LC₅₀ 191 mg / l / 96h (Fathead minnow - Pimephales promelas)EC₅₀ 169 mg / l / 48h (water flea - daphnia)**52829-07-9 bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate**LC₅₀ 4.4 mg / l / 96h (Bluegill - Lepomis macrochirus)

4.4 mg / l / 96h (fish)

EC₅₀ 8.6 mg / l / 48h (water flea - daphnia)**54068-28-9 dioctyltin acetylacetonate**LC₅₀ 86 mg / l / 96h (Fathead minnow - Pimephales promelas)EC₅₀ 58.6 mg / l / 48h (water flea - daphnia)

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- EC₅₀ 300 mg / l / 24h (Chlorophyceae - Scenedesmus subspicatus)
- **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:** 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**
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, ADN, IMDG, IATA | Void |
| · 14.2. UN proper shipping name | |
| · DOT, ADR, ADN, 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

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Trade name / Article-No: KLEIBERIT 601.2*(Contd. of page 7)***· EU-Regulations**

54068-28-9 dioctyltin acetylacetonate: REACH, Annex XVII, No. 20

· 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.

· 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 1 (Self-assessment): slightly hazardous for water.**· VOC - 2010/75/EU [g/L]:** 46,9 g/l**· VOC - 2010/75/EU [%]:** <0,10 %**· 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

H225 Highly flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H361f Suspected of damaging fertility.

H371 May cause damage to organs.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: Safety & Environment**· Version number of previous version:** 4*(Contd. on page 9)*

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Trade name / Article-No: KLEIBERIT 601.2*(Contd. of page 8)***· 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. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Repr. 2: Reproductive toxicity – Category 2
STOT SE 2: Specific target organ toxicity (single exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

EU