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

Printing date 07.07.2020 Version-No. 6 Revision: 03.07.2015

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

· **1.1. Product identifier**

· **Trade name / Article-No: KLEIBERIT *466.0***

· **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:**
KLEBCHEMIE
M.G. Becker GmbH & Co. KG
Max-Becker-Str. 4
D - 76356 Weingarten / Baden
Germany
· **Further information obtainable from:**
phone: +49-7244-62-0
FAX: +49-7244-700-0
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)

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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:**
Contains 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4isothiazolin-3-one (mixture in a ratio 3:1). 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:** Synthetic polymer emulsion of polyvinylacetate in water

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· **Dangerous components:**

· Registry-No's	Identification / Classification GHS-CLP	%
CAS: 108-88-3 Reg.nr.: 01-2119471310-51-XXXX	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	< 2.5%
CAS: 108-94-1 Reg.nr.: 01-2119453616-35-XXXX	cyclohexanone Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	< 2.5%

· **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:** No special measures required.
· **After inhalation:** Unnecessary
· **After skin contact:**
Rinse with warm water.
If skin irritation continues, consult a doctor.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
Rinse out mouth with plenty of water.
Seek medical treatment.
· **Information for doctor:**
· **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** Ethanoic acid
· **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.
Dilute with plenty of 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**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

· **Handling:**
· **7.1. Precautions for safe handling**
Appropriate regular employee training.
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.
Clean the pipe before decoupling
Use drum pumps or pour from the container carefully
Wear protective gloves/protective clothing/eye protection/face protection.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
No special measures required.
Waste air is to be released into the atmosphere only via suitable separators.
consider the national occupational limit value or equivalent value
Application temperature is not higher than 20°C above the surrounding temperature
Avoid contact with the skin.
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 A or better.
Absorb spilled amount immediately.
· **Information about fire - and explosion protection:**
Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear ofignition sources.
· **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:** No special measures required.
· **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

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1. Control parameters**

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

108-88-3 toluene

Dermal	DNEL long term	384 mg/kg (human being)
Inhalative	DNEL short term	384 mg/m3 (human being)
	DNEL long term	192 mg/m3 (human being)

108-94-1 cyclohexanone

Dermal	DNEL short term	4 mg/kg (human being)
	DNEL long term	4-20 mg/kg (human being)
Inhalative	DNEL short term	80 mg/m3 (human being)
	DNEL long term	20-40 mg/m3 (human being)

· **PNECs**

108-88-3 toluene

PNEC- Freshwater	0.68 mg/l (x00)
PNEC-seawater	0.68 mg/l (x00)

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PNEC-Freshwater sediment	16.39 mg/kg (x00)
PNEC-Seawater sediment	16.39 mg/kg (x00)
PNEC-soil	2.89 mg/kg (x00)

108-94-1 cyclohexanone

PNEC- Freshwater	0.0329 mg/l (x00)
PNEC-seawater	0.00329 mg/l (x00)
PNEC-Freshwater sediment	0.0951 mg/kg (x00)
PNEC-Seawater sediment	0.0512 mg/kg (x00)
PNEC-soil	0.0143 mg/kg (x00)
PNEC-wastewater treatment plant	10 mg/l (x00)

· **Ingredients with biological limit values:**

108-88-3 toluene

BGW (Germany) 600 µg/l
Untersuchungsmaterial: Vollblut
Probennahmezeitpunkt: Expositionsende bzw. Schichtende
Parameter: Toluol

1.5 mg/l
Untersuchungsmaterial: Urin
Probennahmezeitpunkt: bei Langzeitexposition: Nach mehreren vorangegangenen Schichten, Expositionsende bzw. Schichtende
Parameter: o-Kresol

BEI (USA) 0.02 mg/L
Medium: blood
Time: prior to last shift of workweek
Parameter: Toluene

0.03 mg/L
Medium: urine
Time: end of shift
Parameter: Toluene

0.3 mg/g creatinine
Medium: urine
Time: end of shift
Parameter: o-Cresol with hydrolysis (background)

108-94-1 cyclohexanone

BEI (USA) 80 mg/L
Medium: urine
Time: end of shift at end of workweek
Parameter: 1.2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)

8 mg/L
Medium: urine
Time: end of shift
Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)

BMGV (Great Britain) 2 mmol/mol creatinine
Medium: urine
Sampling time: post shift
Parameter: cyclohexanol

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

108-88-3 toluene

AGW (Germany)	Long-term value: 190 mg/m³, 50 ppm 4(II);DFG, EU, H, Y
PEL (USA)	Long-term value: 200 ppm Ceiling limit: 300; 500* ppm *10-min peak per 8-hr shift
REL (USA)	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm
TLV (USA)	Long-term value: 75 mg/m³, 20 ppm BEI
WEL (Great Britain)	Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk

108-94-1 cyclohexanone

AGW (Germany)	Long-term value: 80 mg/m³, 20 ppm 1(I);AGS, EU, H, Y
PEL (USA)	Long-term value: 200 mg/m³, 50 ppm
REL (USA)	Long-term value: 100 mg/m³, 25 ppm Skin
TLV (USA)	Long-term value: 50 mg/m³, 20 ppm Skin
WEL (Great Britain)	Short-term value: 82 mg/m³, 20 ppm Long-term value: 41 mg/m³, 10 ppm Sk, BMGV

· **8.2. Exposure controls**

· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
· **Respiratory protection:** Not required.
· **Protection of hands:** Protective gloves
· **Material of gloves** A Nitrile rubber - NBR: AlphaTec® (> 0,4 mm)
· **Penetration time of glove material** A: ≥ 480 min
· **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· **9.1. Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
Form: Fluid
Colour: Blue
· **Odour:** Characteristic

· **pH-value at 20 °C:** 6

· **Change in condition**
Initial boiling point and boiling range: 100 °C

· **Flash point:** 68 °C (cc)

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

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· **Density at 20 °C:** ca. 1.2 g/cm³

· **Solubility in / Miscibility with water:** Fully miscible.

· **Viscosity:**
Dynamic at 20 °C: ca. 10000 mPas

· **9.2. Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1. Reactivity** see item 10.3
· **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 toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.
· **LD/LC_{50} values relevant for classification:**

108-88-3 toluene

Oral	LD_{50}	636 mg/kg (rat)
Dermal	LD_{50}	12200 mg/kg (rabbit)
		12000 mg/kg (rat)
Inhalative	LC_{50} /4 h	49 mg/l (rat)

108-94-1 cyclohexanone

Oral	LD_{50}	1620 mg/kg (rat)
Dermal	LD_{50}	794 mg/kg (rbt)
Inhalative	LC_{50} /4 h	>6.2 mg/l (rat)

· **Primary irritant effect:**
· **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.

SECTION 12: Ecological information

· **12.1. Toxicity**
· **Aquatic toxicity:**

108-88-3 toluene

LC_{50} 6.41 mg / l / 96h (fish)
LC_{50} 92 mg / l / 48h (water flea - daphnia)
EC_{50} 3.78 mg / l / 48h (water flea - daphnia)
EC_{50} 270 mg / l / 24h (water flea - daphnia)

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EC_{50} 12.5 mg / l / 72h (green algae-Ps.kirchneriella subcapitata)

108-94-1 cyclohexanone

LC_{50} 527-732 mg / l / 96h (fish)

LC_{50} 536-752 mg / l / 48h (fish)

EC_{50} 820 mg / l / 24h (water flea - daphnia)

· **12.2. Persistence and degradability** No further relevant information available.
· **Other information:** The product is biodegradable.

· **12.3. Bioaccumulative potential** No further relevant information available.
· **12.4. Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Do not allow to enter surface or ground water.
· **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:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
· **12.5. Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6. Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1. Waste treatment methods**
· **Recommendation**
Can be burned with household garbage / commercial waste after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical 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.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1. UN-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:**	
· **Marine pollutant:**	No
· **14.6. Special precautions for user**	Not applicable.
· **14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.

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· **ADR**
· **Remarks:** Transporting in accordance to 2.2.3.1.4 ADR (viscous liquids)

· **IMDG**
· **Remarks:** Transporting in accordance to 2.3.2.2 IMDG (viscous liquids)

· **IATA**
· **Remarks:** Transporting in accordance to 3.3.3.1.1 IATA DGR (viscous liquids)
PAS < 30L; CAO < 100L

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SECTION 15: Regulatory information

· **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
See position no 2 - Hazards Identification

· **EU-Regulations**

108-88-3 toluene: REACH, Annex XVII, No. 48

· **Directive 2012/18/EU - Seveso-III:**
· **Named dangerous substances - ANNEX I** None of the ingredients is included.
· **Regulation (EU) No 649/2012**

71-43-2 benzeneAnnex I Part 1

· **National regulations:**

· **D: Waterhazard class** Water hazard class 1 (Self-assessment): slightly hazardous for water.
· **EU: VOC - Volatile Organic Compounds (Directive 13/1999/EC)**
· **VOC - 2010/75/EU [g/L]:** 54.5 g/l
· **VOC - 2010/75/EU [%]:** 2.71 %

· **15.2. Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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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.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

· **Department issuing SDS:** Safety & Environment
· **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport 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

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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)
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
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
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity - oral – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1