# Material Safety Data Sheet
**selon ISO/DIS 11014**

Printing date 08/01/2023 Version-No. 6 Reviewed on 08/01/2023

## Identification

· **1.1. Product identifier**

· **Trade name / Article No: KLEIBERIT *882.6***

· **Application of the substance / the mixture** Coating

· **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
Allemagne / Germany

KLEIBERIT Adhesives Canada Inc.
45 Sheppard Avenue East, Suite 900
Toronto, Ontario M2N 5W9
Canada .

· **Information department:**

Phone 1-416-256-5842
FAX 1-416-781-4901
Toll free 1888-443-666

· **1.4. Emergency telephone number:**

email: hse@kleiberit.com

1-800-424-9300 (CHEMTREC)
1-800-451-1403 (SARA-HOTLINE)

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## Hazard(s) identification

· **2.1. Classification of the substance or mixture**

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

Flam. Liq. 2 H225 Highly flammable liquid and vapour.
Eye Irrit. 2A H319 Causes serious eye irritation.
Carc. 1A H350 May cause cancer.

· **2.2. Label elements**

· **Hazard pictograms**

GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

ethanol

· **Hazard statements**

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H350 May cause cancer.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243 Take actions to prevent static discharges.
P280 Wear protective gloves / eye protection.
P261 Avoid breathing mist/vapours/spray.
P302+P352 IF ON SKIN: Wash with plenty of water.
P404 Store in a closed container.

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· **NFPA-ratings (scale 0 - 4) - USA:**

Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4) - USA:**

Health = 1
Fire = 3
Reactivity = 0

· **WHMIS Classes, Divisions and Subdivisions - Canada**
B2 - Flammable liquid

· **Class B - Flammable and Combustible Materials** Division 2 - Flammable Liquid
· **Class D - Poisonous and Infectious Materials**
Division 2 - Materials Causing Other Toxic Effects
Subdivision B - Toxic Materials
· **CARCINOGENICITY** NTP: No IARC: No OSHA: No
· **2.3. Other hazards**
The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

## Composition/information on ingredients

· **3.2. Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

| · Registry-No's | Identification / Classification GHS-CLP | % |
|---|---|---|
| CAS: 64-17-5<br>RTECS: KQ 6300000 | ethanol<br>Flam. Liq. 2, H225; Carc. 1A, H350 | 40-50% w/w |
| CAS: 67-64-1<br>RTECS: AL 3150000 | acetone<br>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 | 10-20% w/w |

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

## First-aid measures

· **4.1. Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink 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.

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## Fire-fighting measures

· **Flammability**
See 9 - Physical and chemical properties
- Flash point
· **If yes, under which conditions ?** Ignition sources, open flames, static discharge.
· **5.1. Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:**
· **Flash point :** See Pos. 9
· **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.

## Accidental release measures

· **6.1. Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
Ensure adequate ventilation
· **6.2. Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Suppress gases/fumes/haze with water spray.
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).
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.

## Handling and storage

· **Handling:**
· **7.1. Precautions for safe handling**
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 solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
Or use outdoors with adequate ventilation.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Handle the substance preferably in closed system
Waste air is to be released into the atmosphere only via suitable separators.
Wear protective gloves/protective clothing/eye protection/face protection.
Appropriate regular employee training.
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 4 hours

· **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.

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· **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.

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## Exposure controls/personal protection

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

· **8.1. Control parameters**
· **Components with limit values that require monitoring at the workplace:**
· **Ingredients with biological limit values:**

**67-64-1 acetone**
BEI (USA) 50 mg/L
Medium: urine
Time: end of shift
Parameter: Acetone (nonspecific)

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

**64-17-5 ethanol**

| | |
|---|---|
| EL (USA) | Short-term value: 1000 ppm |
| EV (USA) | Long-term value: 1.900 mg/m³, 1.000 ppm |
| PEL (USA) | Long-term value: 1900 mg/m³, 1000 ppm |
| REL (USA) | Long-term value: 1900 mg/m³, 1000 ppm |
| TLV (USA) | Short-term value: 1880 mg/m³, 1000 ppm |

**67-64-1 acetone**

| | |
|---|---|
| EL (USA) | Short-term value: 500 ppm<br>Long-term value: 250 ppm |
| EV (USA) | Short-term value: 750 ppm<br>Long-term value: 500 ppm |
| PEL (USA) | Long-term value: 2400 mg/m³, 1000 ppm |
| REL (USA) | Long-term value: 590 mg/m³, 250 ppm |
| TLV (USA) | Short-term value: 1187 mg/m³, 500 ppm<br>Long-term value: 594 mg/m³, 250 ppm<br>BEI |
| IOELV (European Union) | Long-term value: 1210 mg/m³, 500 ppm |

· **8.2. Exposure controls**
limit the exposure to:
8 hours
· **Personal protective equipment:**
· **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
· **Breathing equipment:**
Organic gases/vapors (boiling point <'less than' 149 °F/65 °C): eg.
[1] (F)OV - (Full Facepiece) Organic Vapor Respirator
[2] **Europe:** EN 371 Filtertype AX, brown
At spray application respiratory protection must be worn.
· **Protection of hands:** After use of gloves apply skin-cleaning agents and skin cosmetics.
· **Material of gloves** B Polyethylennylon: Barrier™ (0,062 mm)
· **Eye protection:** Tightly sealed goggles

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## Physical and chemical properties

· **9.1. Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**
**Form:** Fluid
**Color:** Orange
· **Odor:** Alcohol-like
· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**
**Melting point/Melting range:** Undetermined.
**Boiling point/Boiling range:** 55 °C (131 °F)

· **Flash Point:** 11 °C (52 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition Temperature:** 425 °C (797 °F)

· **Decomposition Temperature:** Not determined.

· **Auto Igniting:** Product is not selfigniting.

· **Danger of Explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion Limits:**
**Lower:** 2.6 Vol %
**Upper:** 15.0 Vol %

· **Vapor Pressure at 20 °C (68 °F):** 233 hPa (175 mm Hg)

· **Density at 20 °C (68 °F):** 0.79 g/cm³ (6.593 lbs/gal)
· **Relative Density** Not determined.
· **Vapour Density** Not determined.
· **Evaporation Rate** Not determined.

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

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**
**Dynamic:** Not determined
**Kinematic at 20 °C (68 °F):** 12 s (DIN 53211/4)
· **9.2. Other information** No further relevant information available.

## 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.

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## Toxicological information

· **11.1. Information on toxicological effects**
· **Acute toxicity:** Based on available data, the classification criteria are not met.

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· **LD/LC50 values that are relevant for classification:**

**64-17-5 ethanol**

| | | |
|---|---|---|
| Oral | $LD_{50}$ | 6200 mg/kg (rat) |
| Dermal | $LD_{50}$ | 20000 mg/kg (rabbit) |
| Inhalative | $LC_{50}$ /4 h | 124.7 mg/l (rat) |

**67-64-1 acetone**

| | | |
|---|---|---|
| Oral | $LD_{50}$ | 5800 mg/kg (rat) |
| Dermal | $LD_{50}$ | 20000 mg/kg (rat) |
| | | 20000 mg/kg (rbt) |
| Inhalative | $LC_{50}$ /4 h | 76 mg/l (rat) |

· **Primary irritant effect:**
· **on the skin:** Based on available data, the classification criteria are not met.
· **on the eye:**
Possible irritating
Causes serious eye irritation.
· **Sensitization:** Based on available data, the classification criteria are not met.
· **Additional toxicological information:**

· **Carcinogenic categories**
· **IARC (International Agency for Research on Cancer)**

ethanol: 1
· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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## Ecological information

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

**64-17-5 ethanol**

$LC_{50}$ 10000 mg / l / 48h (water flea - Daphnia)
8150 mg / l / 48h (gold orfw - Leuciscus idus)

**67-64-1 acetone**

$LC_{50}$ 8120 mg / l / 96h (fish)
$LC_{50}$ 12600 mg / l / 48h (water flea - Daphnia)
$EC_{50}$ 3400 mg / l / 48h (algae)
12100 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.
· **Additional ecological information:**
· **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **12.5. Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6. Other adverse effects** No further relevant information available.

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## Disposal considerations

· **13.1. Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Must be specially treated adhering to official regulations.
· **Uncleaned packagings:**
· **Recommendation:**
Non contaminated packagings can be used for recycling.
Empty contaminated packagings thoroughly. Disposal must be made according to official regulations.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## Transport information

· **14.1. UN-Number**
· **IMDG, IATA** UN1993
· **14.2. UN proper shipping name**
· **DOT, IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ETHANOL, ACETONE)

· **DOT**
· **Class** 3 Flammable liquids
No dangerous good
· **Label** 3
· **IMDG, IATA**
· **Class** 3 Flammable liquids
· **Label** 3
· **14.4. Packing group**
· **DOT, IMDG, IATA** II
· **14.5. Environmental hazards:**
· **Marine pollutant:** No
· **14.6. Special precautions for user** Warning: Flammable liquids
· **EMS Number:** F-E,S-E
· **Stowage Category** B
· **14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **IMDG**
· **Limited quantities (LQ)** 1L
· **Excepted quantities (EQ)** Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ETHANOL, ACETONE), 3, II

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## Regulatory information

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

· **TSCA (Toxic Substances Control Act) - USA:**

64-17-5 ethanol

67-64-1 acetone

· **DSL (Canadian Domestic Substance List) - Canada:**

64-17-5 ethanol

67-64-1 acetone

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· **National regulations:**
· **VOC - Volatile Organic Compounds**
· **VOC - Content: [g/L]** 474.0 g/l
· **VOC - Volatile organic compounds: content [mass-%]** 60.00 %
· **US (40CFR part59): VOC content [g / L]** 355.5 g/l / 2.97 lb/gl

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

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## 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.

· **USA: Relevant labels and warnings**
HAZCOM LABEL: CAUTION! SUSPECT CANCER HAZARD
HAZCOM LABEL: CAUTION! HARMFUL.

· **Relevant phrases**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.

· **Department issuing SDS:** Safety & Environment
· **Contact:** Dr. Wolfgang Stüber
· **Abbreviations and acronyms:**
ICAO: International Civil Aviation Organisation
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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
· *** Data compared to the previous version altered.** -