

Page 1/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

SECTION 1: Identification of the substance/mixture and of the company	y/undertaking
· 1.1. Product identifier	.
· Trade name / Article-No: KLEIBERIT 848.1	
 • UFI: UEH0-U0KW-H00H-58YF • 1.2. Relevant identified uses of the substance / mixture or uses advised against For professionel use only • Application of the substance / the mixture Priming 	
 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 Flam. Liq. 2 H225 Highly flammable liquid and vapour. Eye Irrit. 2 H319 Causes serious eye irritation. 	
Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H336 May cause drowsiness or dizziness.	
· 2.2. Label elements · Hazard pictograms	
GHS02 GHS07	
· Signal word Danger	
 Hazard-determining components of labelling: 2-butanone maleic anhydride Hazard statements H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. 	
H336 May cause drowsiness or dizziness.	(Contd. on page 2)



Page 2/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1 (Contd. of page 1) Precautionary statements Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No P210 smoking. P243 Take action to prevent static discharges. P261 Avoid breathing vapours. P280 Wear protective gloves / eye protection. P302+P352 IF ON SKIN: Wash with plenty of water and soap. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. · Additional information: EUH066 Repeated exposure may cause skin dryness or cracking. · 2.3. Other hazards · Results of PBT and vPvB assessment · PBT: Not applicable. · vPvB: Not applicable. · Determination of endocrine-disrupting properties 78-93-3 2-butanone: List II SECTION 3: Composition/information on ingredients · 3.2 Mixtures · Description: Mixture of substances listed below with nonhazardous additions. Dangerous components: Identification / Classification GHS-CLP % **Registry-No's** CAS: 78-93-3 80-90% 2-butanone Reg.nr.: 02-2119752535-35-XXXX Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, 01-2119457290-43-XXXX EUH066 CAS: 141-78-6 ≥5-<10% Acetic ether Reg.nr.: 01-2119475103-46-XXXX Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066 CAS: 108-31-6 ≥0.001-<0.1% maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 % • 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 · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

(Contd. on page 3)



		Page 3/11
	Safety data sheet according to 1907/2006/EC, Article 31	
Printing date 21.07.2022	Version-No. 9 (replaces version 8)	Revision: 19.07.2022
Trade name / Article-No: KLEIB	ERIT 848.1	
· After skin contact:		(Contd. of page 2)
	n wool or cellulose. Then wash and rinse thorough Isult a doctor.	ly with water and a mild cleaning
After eye contact: Rinse ope After swallowing: Call for a d	ened eye for several minutes under running water.	Then consult a doctor.
Headache Drowsiness Dizziness		
Nausea	diate medical attention and special treatment r n available.	needed
SECTION 5: Firefightin	g measures	
For safety reasons unsuitat 5.2. Special hazards arising 5.3. Advice for firefighters	nts: Fight larger fires with water spray or alcohol resist ble extinguishing agents: Water with full jet from the substance or mixture No further relev r self-contained respiratory protective device.	
SECTION 6: Accidental	release measures	
 6.1. Personal precautions, p Wear protective equipment. K Particular danger of slipping of Keep away from ignition source 6.2. Environmental precauti 6.3. Methods and material for Absorb with liquid-binding ma Ensure adequate ventilation. 6.4. Reference to other sect See Section 7 for information 	protective equipment and emergency procedur Keep unprotected persons away. on leaked/spilled product. ces. ons: Prevent seepage into sewage system, work or containment and cleaning up: terial (sand, diatomite, acid binders, universal bind ions on safe handling. on personal protection equipment.	pits and cellars.
SECTION 7: Handling a	and storage	
measures are insufficient to k respiratory protective device. Spraying: in vented cabin with	e training. bly in closed system as are required. nges per hour can be achieved by using a local exhaustion or ge eep the vapour concentration below the workplac a laminar air flow ctive clothing/eye protection/face protection.	
		EL



Page 4/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1

(Contd. of page 3) Wear suitable respiratory protective device when decanting larger quantities without extractor facilities. Application temperature is not higher than 20°C above the surrounding temperature 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. Use drum pumps or pour from the container carefully Avoid taking samples by immersion 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. Open and handle receptacle with care. Clean the pipe before decoupling Close the container immediately after usage. · 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: Store in a cool location. Store outdoors. Prevent any seepage into the ground. • Information about storage in one common storage facility: Observe the national regulations. • Further information about storage conditions: Store only outside or in explosion proof rooms. · 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 78-93-3 2-butanone Dermal DNEL long term 1,161 mg/kg (human being) Inhalative DNEL long term 600 mg/m3 (human being) 141-78-6 Acetic ether DNEL long term 63 mg/kg (human being) Dermal Inhalative DNEL short term 1,468 mg/m3 (human being) DNEL long term 734 mg/m3 (human being) 108-31-6 maleic anhydride Inhalative DNEL long term 0.4 mg/m3 (human being) **PNECs** 78-93-3 2-butanone **PNEC-** Freshwater 55.8 mg/l (not specified) **PNEC-seawater** 55.8 mg/l (not specified) 284.7 mg/kg (not specified) PNEC-Freshwater sediment **PNEC-Seawater sediment** 284.7 mg/kg (not specified) (Contd. on page 5) EU



Page 5/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1

			(Contd. of page 4)
PNEC-soil		22.5 mg/kg (not specified)	
PNEC-wastewate	er treatment pla	ant 709 mg/l (not specified)	
141-78-6 Acetic	ether		
PNEC- Freshwat	er	0.26 mg/l (not specified)	
PNEC-seawater		0.026 mg/l (not specified)	
PNEC-periodic re	elease	1.65 mg/l (not specified)	
PNEC-Freshwate	er sediment	1.25 mg/kg (not specified)	
PNEC-Seawater	sediment	0.125 mg/kg (not specified)	
PNEC-soil		0.148 mg/kg (not specified)	
PNEC-wastewate	er treatment pla	ant 650 mg/l (not specified)	
108-31-6 maleic	anhvdride		
PNEC- Freshwat	•	0.1 mg/l (not specified)	
PNEC-seawater		0.01 mg/l (not specified)	
PNEC-Freshwate	er sediment	0.334 mg/kg (not specified)	
PNEC-Seawater	sediment	0.033 mg/kg (not specified)	
PNEC-soil		0.042 mg/kg (not specified)	
PNEC-wastewate	er treatment pla	ant 44.6 mg/l (not specified)	
· Ingredients with	biological li	imit values:	
78-93-3 2-butan	000		
BGW (Germany)			
	Untersuchung	smaterial: Urin	
	Probennahme Parameter: 2-	zeitpunkt: Expositionsende bzw. Schichtende	e
· CAS No. Desi	gnation of ma	iterial % Type Value Unit	
78-93-3 2-butan			
IOELV (INT)		lue: 900 mg/m ³ , 300 ppm	
	-	ue: 600 mg/m³, 200 ppm ue: 600 mg/m³, 200 ppm	
AGW (Germany)	1(I);DFG, EU,		
141-78-6 Acetic	.,		
IOELV (INT)		lue: 1468 mg/m³, 400 ppm	
		ue: 734 mg/m³, 200 ppm	
AGW (Germanv)	-	ue: 730 mg/m³, 200 ppm	
	2(I);DFG, EU,		
108-31-6 maleic	anhydride		
AGW (Germany)	Long-term val 1;=2.5=(I);DF0	ue: 0.081 mg/m³, 0.02 ppm G, Sah, Y, 11	
· 8.2. Exposure c	ontrols		
limit the exposure	e to:		
8 hours			(Contd. on page 6)



Page 6/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1		
additional to professional application with multiple and limit the exposure to 4 hours · Appropriate engineering controls No further data;	-	(Contd. of page 5)
 Individual protection measures, such as persona General protective and hygienic measures: The usual precautionary measures are to be adhered Respiratory protection: Use suitable respiratory protective device in case of i Filter A (DIN EN 14 387) At spray application respiratory protection must be we Hand protection Protective gloves Material of gloves <u>B</u> Polyethylennylon: Barrier™ (0, Eye/face protection Safety glasses Body protection: Protective work clothing Environmental exposure controls The floor surface in the facility has to be sealed. Waste air is to be released into the atmosphere only 	t to when handling chemicals. nsufficient ventilation: orn. 062 mm)	
SECTION 9: Physical and chemical prope	erties	
• 9.1. Information on basic physical and chemical p		
· General Information · Physical state	Fluid	
· Colour:	Colourless	
· Odour:	Fruit-like	
· Odour threshold:	Not determined.	
· Melting point/freezing point:	Undetermined.	
· Boiling point or initial boiling point and boiling	Shacterninea.	
range	76 °C	
· Flammability	Highly flammable.	
· Lower and upper explosion limit	ngny nannabie.	
· Lower:	1.8 Vol %	
· Upper:	11.5 Vol %	
· Flash point:	-4 °C	
· Ignition temperature:	460 °C	
Decomposition temperature:	Not determined.	
· pH	Not determined.	
Viscosity:		
Kinematic viscosity	Not determined.	
· Dynamic at 20 °C:	ca. 10 mPas	
Solubility		
water:	Not miscible or difficult to mix.	
· Partition coefficient n-octanol/water (log value)	Not determined.	
· Vapour pressure at 20 °C:	105 hPa	
Density and/or relative density		
· Density at 20 °C:	ca. 0.8 g/cm³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
		(Contd. on page 7)



Page 7/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1

	(Contd. of page 6)
[•] 9.2. Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and	
environment, and on safety.	
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
Change in condition	
• Evaporation rate	Not determined.
Information with regard to physical hazard classes	3
· Explosives	Void
· Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Highly flammable liquid and vapour.
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.
- LD/LC₅₀ values relevant for classification:

78-93-3 2-butanone

Oral LD₅₀ >2,193 mg/kg (rat)



Page 8/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

(Contd. of page 7)

Trade name / Article-No: KLEIBERIT 848.1

141-78-6 Acetic ether

Inhalative LC₅₀ /4 h 29.3 mg/l (rat)

108-31-6 maleic anhydride

Oral LD₅₀ 1,090 mg/kg (rat)

Dermal LD₅₀ 2,620 mg/kg (rabbit)

• Skin corrosion/irritation Based on available data, the classification criteria are not met.

• Serious eye damage/irritation Causes serious eye irritation.

• Respiratory or skin sensitisation May cause an allergic skin reaction.

• 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 May cause drowsiness or dizziness.

• 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

78-93-3 2-butanone: List II

SECTION 12: Ecological information

12.1. Toxicity

• Aquatic toxicity:

78-93-3 2-butanone

LC₅₀ 2,990 mg / I / 96h (Fathead minnow - Pimephales promelas) EC₅₀ 308 mg / I / 48h (water flea - daphnia) EC₅₀ 1,972 mg / I / 72h (green algae-Ps.kirchneriella subcapitata)

141-78-6 Acetic ether

 LC_{50} 230 mg / I / 96h (fish)

EC₅₀ 5,600 mg / I / 48h (algae)

610 mg / I / 48h (water flea - daphnia) (DIN 38412)

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 For information on endocrine disrupting properties see section 11.

(Contd. on page 9)



Page 9/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

(Contd. of page 8)

Trade name / Article-No: KLEIBERIT 848.1

· 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:
- Not known to be hazardous to water.

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

07 03 04* other organic solvents, washing liquids and mother liquors

· 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	UN1993
14.2. UN proper shipping name	
DOT	Flammable liquids, n.o.s. (METHYL ETHYL KETONE, ETHYL ACETATE)
· ADR	1993 FLAMMABLE LIQUID, N.O.S. (METHYL ETHYL KETONE, ETHYL ACETATE)
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (METHYL ETHYL KETONE, ETHYL ACETATE)
 14.3. Transport hazard class(es) 	
Class	3 Flammable liquids.
· Label	3
· 14.4. Packing group	
· ADR, IMDG, IATA	II
14.5. Environmental hazards:	Not applicable.
 14.6. Special precautions for user 	Warning: Flammable liquids.
Hazard identification number (Kemler code):	33
· EMS Number:	F-E,S-D
· Stowage Category	В
• 14.7. Maritime transport in bulk according to IMC	
instruments	Not applicable.
ADR	
· Limited quantities (LQ)	1L
	(Contd. on page 10)



Page 10/11

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

Printing date 21.07.2022	Version-No. 9 (replaces version 8)	Revision: 19.07.2022
Trade name / Article-No: KLEIBER	ıт 848.1	
 Excepted quantities (EQ) 	Code: E2 Maximum net quantity per inr Maximum net quantity per ou	
 Transport category Tunnel restriction code 	2 D/E	
 IMDG Limited quantities (LQ) Excepted quantities (EQ) 	1L Code: E2 Maximum net quantity per inr Maximum net quantity per ou	
SECTION 15: Regulatory • 15.1. Safety, health and enviro See position no 2 - Hazards Ide	nmental regulations/legislation specific for the	e substance or mixture
 Seveso category P5c FLAMMA Qualifying quantity (tonnes) for 	- ANNEX I None of the ingredients is included.	

- \cdot Qualifying quantity (tonnes) for the application of upper-tier requirements $50.000\ t$
- 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

78-93-3 2-butanone: 3

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

78-93-3 2-butanone: 3

· 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.
- · VOC 2010/75/EU [g/L]: <800.0 g/l
- · VOC 2010/75/EU [%]: <99.00 %

(Contd. on page 11)



Page 11/11

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

Printing date 21.07.2022

Version-No. 9 (replaces version 8)

Revision: 19.07.2022

Trade name / Article-No: KLEIBERIT 848.1

(Contd. of page 10)

EU

· 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.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H336 May cause drowsiness or dizziness.
- H372 Causes damage to organs through prolonged or repeated exposure.
- EUH066 Repeated exposure may cause skin dryness or cracking.

EUH071 Corrosive to the respiratory tract.

- · Department issuing SDS: Safety & Environment
- · Version number of previous version: 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 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Resp. Sens. 1: Respiratory sensitisation - Category 1 Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1A: Skin sensitisation - Category 1A STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1