

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31 and 2020/878/
EU

Printing date 05.06.2025

Version number 8 (replaces version 7)

Revision: 05.06.2025

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

1.1 Product identifierTrade name: **Cable flux ISO-Flux "KF-L"**UFI: *W7F8-W0RY-200U-OJWV***1.2 Relevant identified uses of the substance or mixture and uses advised against***No further relevant information available.***Application of the substance / the mixture** *Soldering flux***1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

FELDER GMBH
Im Lipperfeld 11
D-46047 Oberhausen

Tel.: 0208/8 50 35-0

Fax.: 0208/2 60 80

<http://www.felder.de>e-mail: info@felder.de**Further information obtainable from:***lab**(mo-thu. 8:00 a.m. - 4:00 p.m./ fr. 8:00 a.m. - 1:00 p.m.)*email: mprobst@felder.de**1.4 Emergency telephone number:***24-hour emergency information:**Giftnotruf Berlin, counselling in German and English*

Phone: (030) 30686 700

EuPCS: PC-TEC-24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008***The product is classified and labelled according to the CLP regulation.***Hazard pictograms**

GHS07 GHS08

Signal word *Warning***Hazard-determining components of labelling:***2-methylpentane-2,4-diol***Hazard statements***H319 Causes serious eye irritation.**H361d Suspected of damaging the unborn child.***Precautionary statements**P101 *If medical advice is needed, have product container or label at hand.*P102 *Keep out of reach of children.*P103 *Read carefully and follow all instructions.*P264 *Wash thoroughly after handling.*P280 *Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.*

(Contd. on page 2)

Safety data sheet

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Trade name: Cable flux ISO-Flux "KF-L"

(Contd. of page 1)

P280 Wear eye protection / face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Labelling of packages where the contents do not exceed 125 ml**Hazard pictograms**

GHS07 GHS08

Signal word Warning**Hazard-determining components of labelling:**

2-methylpentane-2,4-diol

Hazard statements

H361d Suspected of damaging the unborn child.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

Determination of endocrine-disrupting properties

95-14-7 benzotriazole

List II

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Description: Mixture: consisting of the following components.

Dangerous components:

CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25	propan-2-ol ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	<10%
CAS: 107-41-5 EINECS: 203-489-0 Index number: 603-053-00-3 Reg.nr.: 01-2119539582-35	2-methylpentane-2,4-diol ⚠ Repr. 2, H361d ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	<5%
CAS: 110-15-6 EINECS: 203-740-4 Reg.nr.: <1t/year	succinic acid ⚠ Eye Dam. 1, H318	<3%

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: 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: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

Safety data sheet

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(Contd. of page 2)

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:** No special measures required.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.**6.3 Methods and material for containment and cleaning up:**

Dilute with plenty water.

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** No special measures required.**Information about fire - and explosion protection:** No special measures required.**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Store away from foodstuffs.**Further information about storage conditions:** None.**Storage class:** 12**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:****67-63-0 propan-2-ol**WES (Australia) Short-term value: 1230 mg/m³, 500 ppmLong-term value: 983 mg/m³, 400 ppmAGW (Germany) Long-term value: 500 mg/m³, 200 ppm

2(II);DFG, Y

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppmLong-term value: 999 mg/m³, 400 ppm

OEL (Ireland) Short-term value: 400 ppm

Long-term value: 200 ppm

Skin

107-41-5 2-methylpentane-2,4-diolWES (Australia) Ceiling limit: 121 mg/m³, 25 ppmMAK (Germany) Long-term value: 49 mg/m³, 10 ppm

vgl. Abschn. Xc; Dampf und Aerosol

WEL (Great Britain) Short-term value: 123 mg/m³, 25 ppmLong-term value: 123 mg/m³, 25 ppmOEL (Ireland) Short-term value: 125 mg/m³, 25 ppm

(Contd. on page 4)

EU

Safety data sheet

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Trade name: Cable flux ISO-Flux "KF-L"

(Contd. of page 3)

110-15-6 succinic acid

AGW (Germany)	Long-term value: 2 E mg/m ³ 2(I);DFG, Y
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Regulatory information

WES (Australia): Workplace exposure standards for airborne contaminants

AGW (Germany): TRGS 900

WEL (Great Britain): EH40/2020

OEL (Ireland): 2024 CoP for the Safety, Health and Welfare at Work

MAK (Germany): MAK- und BAT-Liste

recommended monitoring procedures in accordance with 2020/878/EU no. 8.1.2:

67-63-0 propan-2-ol: BIA 8415(D), MétroPol Fiche 077 Alcools en C3 à C8(F), MTA/MA-016/A89(ESP), DFG (D, E) Solvent mixtures 6

107-41-5 2-methylpentane-2,4-diol: OSHA PV2101(E) "Hexylen glycol"

Ingredients with biological limit values:**67-63-0 propan-2-ol**

BGW (Germany)	25 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton
	25 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton

Regulatory information BGW (Germany): TRGS 903**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls** No further data; see section 7.**Appropriate engineering controls:**

Ensure adequate ventilation.

Remove the fumes by means of suitable suction devices.

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:

Use suitable respiratory protective device in case of insufficient ventilation.

Filter P2

Hand protection

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Recommended thickness of the material: ≥ 0.4 mm**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions.

Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≤ 6 **Eyeface protection** Safety glasses**Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Colour:**

Blue

Odour:

Characteristic

Odour threshold:

Not determined.

Melting point/freezing point:

Not determined

(Contd. on page 5)

Safety data sheet

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Revision: 05.06.2025

Trade name: Cable flux ISO-Flux "KF-L"

(Contd. of page 4)

Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20 °C	2.3
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	0.99 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	5.0 %
VOC (EC)	3.99 %
Solids content:	3.4 %
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** No further relevant information available.
- 10.2 Chemical stability**
- Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored 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.

(Contd. on page 6)

Safety data sheet

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Trade name: Cable flux ISO-Flux "KF-L"

(Contd. of page 5)

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.*

Primary irritant effect:

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 *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

*Suspected of damaging the unborn child.*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

95-14-7 | benzotriazole

List II

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: *No further relevant information available.*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.*

12.7 Other adverse effects

Additional ecological information:

General notes:

*Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water**Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

SECTION 13: Disposal considerations

13.1 Waste treatment methods

European waste catalogue

06 03 14: *solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13**cleaned sales packaging:*15 01 02: *plastic packaging**overpack:*15 01 01: *paper and cardboard packaging*Uncleaned packaging: 15 01 10*: *packaging containing residues of or contaminated by hazardous substances*

Recommendation:

*Non contaminated packagings may be recycled.**Wash empty containers, neutralize if necessary.*Recommended cleansing agents: *Water, if necessary together with cleansing agents.*

SECTION 14: Transport information

14.1 UN number or ID number

ADR, ADN, IMDG, IATA

Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA

Void

(Contd. on page 7)

— EU —

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(Contd. of page 6)

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

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 Maritime transport in bulk according to IMO**

instruments Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Directive 2012/18/EU

Named dangerous substances - ANNEX I *None of the ingredients is listed.*REGULATION (EU) 2019/1021 on persistent organic pollutants (POP) *None of the ingredients are included.*REGULATION (EC) No 1907/2006 ANNEX XVII *Conditions of restriction: 3***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:****Information about limitation of use:** *Employment restrictions concerning juveniles must be observed.***Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***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.***Reasons for changes:**16.06.2015: *Adaptation to Regulation 453/2010 / EC Annex II*15.10.2015: *section 1, 8, 15 Adaptation to Regulation 830/2015/EU, 2012/18/EU*24.10.2016: *section 8.1*26.04.2018: *section 3, adaption to Regulation 2016/918/EU*15.06.2021: *section 1, 11, 15, 16*19.06.2024: *section 1, 2, 3, 11, 15*05.06.2025: *section 1, 8, 16***Information referred to in Annex I, point 1.3.4.2 of Regulation 1272/2008/EC:****Relevant phrases**H225 *Highly flammable liquid and vapour.*H315 *Causes skin irritation.*H318 *Causes serious eye damage.*H319 *Causes serious eye irritation.*H336 *May cause drowsiness or dizziness.*

(Contd. on page 8)

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(Contd. of page 7)

*H361d Suspected of damaging the unborn child.***Contact:** Dr. M. Probst**Version number of previous version:** 7**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)**IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)**ICAO: International Civil Aviation Organisation**ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)**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**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)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Flam. Liq. 2: Flammable liquids – Category 2**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**Repr. 2: Reproductive toxicity – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3***Safety data sheet SD3054**

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