

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

1.1 Product identifier

Product category

Chemical products (excludes biocidal products)

PC-TEC-24 Welding, soldering, and flux products

Trade name/designation Weller ELECTRONIC FLUX

Identification on the label/Trade name

label designation/Name of product

ELECTRONIC FLUX, No. T0051383199 [UFI: 2EP8-U0A9-S00U-EXCQ]

Other means of identification

SDS-09

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Sector of uses [SU]

FLUXING AGENT / FLUSSMITTEL / ELECTRONIC FLUX

1.3 Details of the supplier of the safety data sheet

Supplier

Weller Tools GmbH

Carl-Benz-Straße 2

Germany-74354 Besigheim

Telephone: +49 7143 580-0

Telefax: +49 7143 580-108

E-mail: info@weller-tools.com

Department responsible for information: environmental department

Information telephone: +49 7143 580-101

Information telefax: +49 7143 580-108

1.4 Emergency telephone number

GIZ Mainz +49 6131 - 19240 (language - german, english, french)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

health hazards

Eye Irrit. 2

hazard statements for health hazards

H319 Causes serious eye irritation.

health hazards

STOT SE 3

hazard statements for health hazards

H336 May cause drowsiness or dizziness.

Physical hazards

Flam. Liq. 2

hazard statements for physical hazards

H225 Highly flammable liquid and vapour.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard components for labelling

Propan-2-ol

Hazard pictograms



GHS02

GHS07

Signal word

Danger

Hazard statements

hazard statements for health hazards

H336 May cause drowsiness or dizziness.

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Precautionary statements

General:

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

P102 Keep out of reach of children.

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Response:

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a doctor if you feel unwell.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Special rules for supplemental label elements for certain mixtures

EUH210 Safety data sheet available on request.

Labelling of packages where the contents do not exceed 125 ml

Content < 125 ml

Special rules on packaging

Tactile warning according to EN/ISO 11683.

2.3 Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.1/3.2 Substances/Mixtures

Description

Mixture / Mélange / Gemisch

Hazardous ingredients

propan-2-ol

>=50 - <=100 %

CAS 67-63-0

EC 200-661-7

INDEX 603-117-00-0

REACHNo 01-2119457558-25

Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336

2-methylpentane-2,4-diol

<2,5 %

CAS 107-41-5

EC 203-489-0

INDEX 603-053-00-3

REACHNo 01-2119539582-35

Eye Irrit. 2, H319 / Skin Irrit. 2, H315

Succinic-acid / Bernsteinsäure

<2,5 %

CAS 110-15-6

EC 203-740-4

Eye Dam. 1, H318

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation

Remove casualty to fresh air and keep warm and at rest.

Following skin contact

In case of skin irritation, seek medical treatment. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Consult an ophthalmologist.

Following ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Extinguishing powder. Dry sand. alcohol resistant foam.

Unsuitable extinguishing media

High power water jet.

Water

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide

5.3 Advice for firefighters

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures

Remove persons to safety.

Personal precautions

Use personal protection equipment.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:

Sand

Universal binder

For cleaning up

Unsuitable material for diluting or neutralising:

Water

6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Advices on safe handling

All work processes must always be designed so that the following is excluded:

Generation/formation of aerosols

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

Measures to prevent fire

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in a cool, well-ventilated place.

Hints on joint storage

Materials to avoid

Keep away from:

Combustible substance

Food and feedingstuffs

Storage class

Flammable liquids

Storage class

Storage class / Lagerklasse 3

Further information on storage conditions

Protect against:

Heat

UV-radiation/sunlight

Frost

storage temperature

Value ≥ 5 - ≤ 20 °C

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	Substance name	LTV	STV	remark
67-63-0	Propan-2-ol	999 mg/m ³ 400 ppm	1250 mg/m ³ 500 ppm	
107-41-5	2-Methylpentane-2,4-diol	123 mg/m ³ 25 ppm	123 mg/m ³ 25 ppm	Great Britain (UK)
				Great Britain (UK)

LTV = long-term occupational exposure limit value

STV = short-term occupational exposure limit value

source: GESTIS International Limit Values (<http://limitvalue.ifa.dguv.de/>)

Monitoring and observation processes: GESTIS Analytical Methods (<http://amcaw.ifa.dguv.de/>)

biological limit values

Limit value type (country of origin):

BLV (DE)

Substance name propan-2-ol

CAS No. 67-63-0

EC No. 200-661-7

parameter

Acetone

Limit value 25 mg/L

Test material:

Whole blood (B)

Time of sampling:

Expositionsende / Schichtende _ exposure end / shift end

source

TRGS 903

Substance name propan-2-ol

CAS No. 67-63-0

EC No. 200-661-7

parameter

Acetone

Limit value 25 mg/L

Test material:

Urine (U)

Time of sampling:

Expositionsende / Schichtende _ exposure end / shift end

source

TRGS 903

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposure

Reduce exposure to fume by keeping operating temperatures as low as possible taking into account occupational exposure limits and safe handling temperatures (see Section 7). Where practicable handle within an enclosed process. Alternatively local exhaust ventilation should be considered.

Personal protection equipment

Eye/face protection

Suitable eye protection:

goggles

Skin protection

Suitable gloves type

Disposable gloves

Suitable material:

NBR (Nitrile rubber)

Thickness of the glove material >0,33 mm

Recommended glove articles

DIN-/EN-Norms

EN ISO 374

remark

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection:

Suitable protective clothing:

lab coat

Respiratory protection

remark

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state

liquid

Colour

amber coloured

Odour

Isopropyl alcohol.

	parameter	Method - source - remark
Melting point/freezing point		not determined
Boiling point or initial boiling point and boiling range	ca.82 °C	
flammability		not determined
Upper explosion limit	12 Vol-%	
lower explosion limit	2 Vol-%	
Flash point (°C)	13 °C	
Auto-ignition temperature	300 °C	
Decomposition temperature		not determined
pH	ca.3,9	
Kinematic viscosity		not determined
Water solubility		partially miscible
Soluble (g/L) in		not determined
Fat solubility		not determined
Partition coefficient: n-octanol/water		not determined
Vapour pressure	43 hPa	
Density and/or relative density	0,81 g/cm ³	Temperature 20 °C
Relative vapour density		not determined
particle characteristics		not determined

9.2 Other information

Solvent content

Value 85 %

remark

VOC (EU) 85%

Solid content

Value 13,1 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3 Possibility of hazardous reactions

In use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

Materials to avoid

This information is not available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute dermal toxicity

ingredient propan-2-ol

Acute dermal toxicity 12,8 mg/kg

Effective dose

LD50:

Species:

Rabbit

Acute inhalation toxicity (vapour)

ingredient propan-2-ol

Acute inhalation toxicity (vapour) 30 mg/L

Effective dose

LC50:

Exposure time 4 h

Species:

Rat

Acute oral toxicity

5,045 mg/kg

Effective dose

LD50:

Species:

Rat

Serious eye damage/irritation

Assessment/classification

strongly irritant.

skin corrosion/irritation

Assessment/classification

Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Overall Assessment on CMR properties

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2.

Germ cell mutagenicity

Assessment/classification

Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment/classification

Based on available data, the classification criteria are not met.

STOT-single exposure

STOT SE 3

Narcotic effects

Assessment/classification

May cause drowsiness or dizziness.

STOT-repeated exposure

STOT RE 1 and 2

Inhalative specific target organ toxicity (repeated exposure)

Assessment/classification

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

No information available.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

remark

Dispose of waste according to "Kreislaufwirtschaftsgesetz (KrWG)". Recycle according to official regulations.

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste code product 140603

hazardous waste Yes.

Waste name

other solvents and solvent mixtures

Properties of waste which render it hazardous

HP3 Flammable

HP4 Irritant — skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

After intended use

Waste code packaging 150102

hazardous waste No

Waste name

plastic packaging

Disposal operations

not determined

Recovery operations

not determined

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	1219	1219	1219
14.2 Proper Shipping Name	ISOPROPANOL	ISOPROPANOL	Isopropanol
14.3 Class(es)	3	3	3

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.4 Packing group	II	II	II
14.5 Environmental hazards	No	No	No
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Maritime transport in bulk according to IMO instruments	not applicable	not applicable	not applicable

Additional information - Land transport (ADR/RID)

Hazard label(s)	3
Classification code	F1
Limited quantity (LQ)	1 L
Hazard identification number (Kemler No.)	33
tunnel restriction code	D/E
transport category	2

remark

1219 ISOPROPANOL (ISOPROPYLALKOHOL), Gemisch
1219 ISOPROPANOL (ISOPROPYL ALCOHOL), mixture

Additional information - Sea transport (IMDG)

Marine pollutant	No
remark	UN "Model Regulation": UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) MIXTURE, 3, II

remark

Klasse 3 Entzündbare flüssige Stoffe
Class 3 Flammable liquids
EMS-No.: F-E, S-D
Stowage Category: B

Additional information - Air transport (ICAO-TI / IATA-DGR)

Limited quantity (LQ)	1
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remark

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation

Authorisations and/or restrictions on use

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations (EU)

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Hazard categories

P5c Flammable liquids

Named dangerous substances

none

To follow:

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

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 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

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)

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, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Indication of changes

20160608: matching section 1, 8, 15 to Regulations 453/2010/EC, 830/2015/EU, 2012/18/EU

20170404: section 13, adaption to Regulation 2016/918/EU

20190503: section 1, 8.1

20210223: section1 - UFI, 2.2 (<125ml), 8, 11, 13, 14, 16

20220217: section 2.2 H225 not if <125ml, section 14 - wording ISOPROPANOL

Relevant R-, H- and EUH-phrases (Number and full text)

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.