Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Trade name: FL 911		Water soluble Soldering flux	OR H0 / F-LW 2 DIN-EN 29 454.1 / 2.1.3.
1.)	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING		
1.1.)	Product identifier Product form: Trade name: Product code:	Mixture FL 911 Water Soluble Soldering flux FL 911	
1.2.)	Relevant identified uses of the substance or mixture ad uses advised against		
1.2.1.	Relevant identified uses Main use category: Use of the substance/mixture:	Reserved for industrial and professional us Soldering flux	e
1.2.2.) Uses advised against	No additional information available.	
1.3.)	Details of the supplier of the safety data sheet		
	Manufacturer/Supplier: address:	EDSYN GMBH EUROPA Finkenweg 2 Tel. 0934 D 97892 Kreuzwertheim Fax: 0934	
1.4.)	Emergency telephone number	closed hospital	
2.)	HAZARDS IDENTIFICATION		
2.1.)	Classification of the substance or mixture		
	Classification according to Regulation (EC) no 1272/2008 (CLP)	Acute Tox. 4 (inhalation) H332 Skin Corr. 1A H314	
		Full text of hazard classes and H-statemen	ts: see section 16
	Adverse physiochemical, human health and environmental effects	No additional information available.	
	Other information		
	NFPA-Code:	2-0-0	
		2 0	

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

2.2.) Label elements

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

Hazard pictograms (CLP):





GHS05

GHS(

Signal word (CLP): Danger

Hazardous ingredients: Hydroxyethanoic acid

Hazard statements (CLP): H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled

Precautionary statements (CLP): P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye

protection/face protection

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower **P305+P351+P338**IF IN EYES. Rinse cautiously with water for several

minutes. Remove contact lenses, if present and

easy to do. Continue rinsing

2.3.) Other hazards No additional information available

3.) COMPOSITION/INFORMATION ON INGREDIENTS

3.1.) Substance Not applicable

3.2.) Mixture

Hydroxyethanoic acid

Product identifier	%	Classification according to Regulation (EGC) no 1272/2008 (CLP)
(CAS no) 79-14-1 (EC no) 201-180-5 (REACH no) 01-2119485579-17	1-15	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Full text of H-statements: see section 16

4.) FIRST AID MEASURES

4.1.) Description of first aid measures

First aid measures after inhalation: Remove the victim into fresh air. Respiratory problems: consult a

doctor/medical service.

First aid measures after skin contact: Wash immediately with lots of water (15 minutes) shower. Do not apply

(chemical) neutralizing agents.

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

		21.10.2021
	First aid measures after eye contact:	Rinse immediately with plenty of water. Take victim to an ophthalmologist if irritation persists.
	First aid measures after ingestion:	Do not induce vomiting. Consult a doctor/medical service if you feel unwell.
4.2.)	Most important symptoms and effects, both acute and delayed	
	Symptoms/injuries after inhalation:	AFTER INHALATION OF DUST:
		Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
		ON CONTINUOUS EXPOSURE/CONTACT:
		Respiratory difficulties. Possible inflammation of the respiratory tract.
	Symptoms/injuries after skin contact:	Caustic burns/corrosion of the skin.
	Symptoms/injuries after eye contact:	Corrosion of the eye tissue. Inflammation/damage of the eye tissue.
	Symptoms/injuries after ingestion:	Irritation of the gastric/intestinal mucosa. Nausea. Vomiting.
		AFTER ABSORPTION OF HIGH QUANTITIES:
		Headache. Abdominal pain. Diarrhoea. Possible esophageal perforation. Decreased renal function. Coordination disorders. Disturbances of consciousness.
	Chronic symptoms:	ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
		Enlargement/affection of the liver. Affection of the renal tissue. Change in the haemogramme/blood composition.
4.3.)	Indication of any immediate medical attention and special treatment needed	No additional information available.
5.)	FIREFIGHTING MEASURES	
5.1.)	Extinguishing media	
	Suitable extinguishing media:	No specific fire-fighting instructions required.
5.2.)	Special hazards arising from the substance or mixture	
	Fire hazard:	None.
	Explosion hazard:	Not applicable.
5.3.)	Advice for firefighters	
	Firefighting instructions:	No specific fire-fighting instructions required.

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

6.) ACCIDENTAL RELEASE MEASURES

6.1.) Personal precautions, protective equipment and emergency procedures

6.1.1.) For non-emergency personnel

Protective equipment: Gloves. Face-shield. Corrosion-proof suit. See ""Material-Handling" to

select protective clothing.

Emergency procedures: Wash contaminated clothes. In case of hazardous reactions: keep upwind.

In case of reactivity hazard: consider evacuation.

6.1.2.) For emergency responders No additional information available.

6.2.) Environmental precautions Prevent soil and water pollution. Prevent spreading in sewers.

6.3.) Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite

or powdered limestone.

6.4.) Reference to other sections No additional information available.

7.) HANDLING AND STORAGE

7.1.) Precautions for safe handling Observe normal hygiene standards.

Hygiene measures: Always wash hands and face immediately after handling this product, and

once again before leaving the workplace.

7.2.) Conditions for safe storage, including any incompatibilities

Storage conditions: Store in original container.

Maximum storage period: 2 year

Storage temperature: $5 - 30 \,^{\circ}\text{C}$

Heat and ignition sources: KEEP SUBSTANCE AWAY FROM:

heat sources, ignition sources.

Prohibitions on mixed storage: KEEP SUBSZANCE AWAY FROM:

oxidizing agents, (strong) bases, metals, water/moisture

Storage area: Keep container tightly closed.

Special rules on packaging: SPECIAL REQUIREMENTS:

closing, watertight. dry, clean. correctly labelled. meet the legal requirements. Secure fragile packaging's in solid containers.

Packaging materials: SUITABLE MATERIAL:

synthetic material. glass, polyethylene.

MATERIAL TO AVOID:

metal, steel. Iron, aluminium, tin, zinc.

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

7.3.) Specific 6	end use(s)
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REACH DISCLAIMER:

This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number).

EXPOSURE CONTROLS/PERSONAL 8.) **PROTECTION**

8.1.) Control parameters

No additional information available.

8.2.) Exposure controls

Personal protective equipment:

Gloves. (Nitrile rubber): Recommended thickness. > 0,4 mm. Safety glasses.





The selected protective gloves must meet the specifications of EU Hand protection:

Directive 89/686/EEC and EN 374, derived therefrom.

Safety glasses. Eye protection designed to protect against liquid splashes Eye protection:

should be worn.

Not required for normal conditions of use. Skin and body protection:

Respiratory protection: Work under local exhaust/ventilation.

9.) PHYSICAL AND CHEMICAL **PROPERTIES**

9.1.) Information on basic physical and chemical properties

Physical state: Appearance:

Odour threshold: No data available.

pH:

Colour:

Odour:

Melting point: Not applicable. Freezing point: No data available. > 100°C

Boiling point: Flash point:

Relative evaporation rate

(butylacetate=1): Flammability (solid, gas):

Explosive limits

No data available. No data available.

None. None

None.

Liquid.

Liquid.

3

Colourless

Mild odour.

Vapour pressure:: Relative vapour density at 20 °C:

Relative density:

No data available. No data available. 1 - 1,1 g/ml

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

Solubility: Water: completely soluble. Log Pow: No data available. Log Kow: No data available. Auto-ignition temperature: Not applicable. No data available. Decomposition temperature: Viscosity, kinematic: No data available. No data available. Viscosity, dynamic: Explosive properties: No data available. Oxidising properties: No data available. 9.2.) Other information VOC content:: 0% 10.) STABILITY AND REACTIVITY 10.1.) Reactivity No additional information available. 10.2.) Chemical stability Hygroscopic. 10.3.) Possibility of hazardous reactions No additional information available. 10.4.) Conditions to avoid No additional information available. 10.5.) Incompatible materials Do not mix with oxidizing agents. 10.6.) Hazardous decomposition products No additional information available. 11.) TOXICOLOGICAL INFORMATION 11.1.) Information on toxicological effects Acute toxicity: Inhalation: Harmful if inhaled. FL 911 Water Soluble Soldering Flux ATE CLP (gases) 4500,000 ppmV/4h ATE CLP (vapours) 11,000 mg/l/4h 1,500 mg/l/4h ATE (dust, mist) Hydroxyethanoic acid (79-14-1) LD50 oral rat: 1950 mg/kg (Rat; Other; Literature study; 2040 mg/kg bodyweight; Rat; Experimental value) LC50 inhalation rat (mg/l): >5,2 mg/l/4h (Rat; Experimental value; 3.6 mg/l/4h; Rat; Experimental ATE CLP (oral): 1950,000 mg/kg bodyweight Skin corrosion/irritation: Causes severe skin burns and eye damage. pH-Wert: 3 Serious eye damage/irritation: Serious eye damage, category 1, implicit pH-Wert: 3

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

Respiratory or skin sensitisation: Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity (single exposure):

exposure).

Specific target organ toxicity (repeated

exposure):

Aspirations hazard: Not classified.

12.) ECOLOGICAL INFORMATION

12.1.) Toxicity

Ecological – general: Classification concerning the environment: not applicable.

Not classified.

Not classified.

Ecological – air: Not classified as dangerous for the ozone layer (Regulation EC) No

1005/2009). Not included in the list of fluorinated greenhouse gases

(Regulation (EC) No 842/2006). TA-air class 5.2.5/I.

Ecological – water: Ground water pollutant. Not harmful to fishes (LC50 (96 h.) >1000 mg/l).

Slightly harmful to invertebrates (Daphnia) (EC50 (48 h.): 100 – 1000

mg/l). Harmful to algae. Not harmful to bacteria.

Hydroxyethanoic acid (79-14-1)

EC50 Daphnia 1: 141 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test 48 h;

Daphnia magna. Static system; Fresh water; Experimental value).

LC50 Fish 2: >5000 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h;

Brachydanio rerio)

12.2.) Persistence and degradability

FL 911 Water Soluble Soldering Flux

Persistence and degradability: Readily biodegradable in water. Biodegradable in the soil.

Hydroxyethanoic acid (79-14-1)

Persistence and degradability: Readily biodegradable in water. Biodegradable in the soil.

Biochemical oxygen demand (BOD): 0,18 g O 2 /g substance

ThOD: 0,63 g O 2 /g substance

BOD (% des ThOD): 0,28

12.3.) Bioaccumulative potential

FL 911 Water Soluble Soldering Flux

Bioaccumulative potential: Bioaccumulation: not applicable.

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

	Hydroxyethanoic acid (79-14-1)		
	Log Pow:	-1,11 (Experimental value).	
	Bioaccumulative potential:	Bioaccumulation: not applicable.	
12.4.)	Mobility in soil	No additional information available.	
12.5.)	Results of PBT- and vPvB- assessment	No additional information available.	
12.6.)	Other adverse effects	No additional information available.	
13.)	DISPOSAL CONSIDERATIONS		
13.1.)	Waste treatment methods		
	Regional legislation (waste):	Disposal must be done according to official regulations.	
	Waste disposal recommendations:	Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Do not discharge into drains or the environment. May be discharged to wastewater treatment installation.	
	Additional information:	LWCA (the Netherlands): KGA category 06. Hazardous waste according to Directive 2008/98/EC.	
	Ecology – waste materials:	Do not discharge into surface water. May be discharged to wastewater treatment installation.	
14.)	TRANSPORT INFORMATION	Not regulated for transport. Additional rules to be obtained at EDSYN GMBH EUROPA. Remark: Above mentioned regulations are in force at the moment of publication of this (SDS) safety data sheet. With reference to possible modifications in transport regulations of dangerous goods. We advise to verify its validity at EDSYN GMBH EUROPA.	
15.)	REGULATORY INFORMATION		
15.1.)	Safety, health and environmental regulations/legislation specific for the substance or mixture		
15.1.1	.) EU Regulations	Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances	
	VOC content:	0 %	
	EURAL (code):	16 10 02	

Zentrum für Löt- und Entlötsysteme



EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

21.10.2021

15.1.2	.) National regulations		
	Water hazard class (WGK):	1 – low hazard to waters	
	WGK remark:	Classification water polluting based on the R-phrases in compliance with Verwaltungsvorschriften wassergefährdender Stoffe (VwVwS) vom 27. July 2005 (Anhang 3)	
15.2.)	Chemical safety assessment	Chemical safety assessment for substances in this preparation were carried out.	
16.)	OTHER INFORMATION		
	Other information:	Intrastat code 3402 13 00.	
	Full text of H- and EUH-statements:	Acute Tox. 4 (Inhalation) Acute Tox. 4 (Oral) Skin Corr. 1A	Acute toxicity (inhal.), Category 4 Acute toxicity (oral), Category 4 Skin corrosion/irritation. Category 1A
		H302 H314 H332	Harmful if swallowed Causes severe skin burns and eye damage Harmful if inhaled
16.1.)	Revision date:	12.10.2015 / 19.04.2016 / 08.06.2016	
	Version:	1.0	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

DISCLAIMER

The information in this Safety Data Sheet (SDS) is believed to be correct as of the data issued. Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or the accuracy of this information or the suitability of our products in any given situation. Users of our products should make their own tests to determine the suitability of each such product for their particular purposes. The products discussed are sold without such warranty, either expressed or implied.

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