EDSYN GMBH EUROPA

Zentrum für Löt- und Entlötsysteme

EDSYN GMBH EUROPA, Postfach 1169, D-97888 Kreuzwertheim

24. Oktober 2018

Safety Data Sheet - according to Regulation (EC) no 1907/2006

INTERNATIONAL STANDARD NORM ISO 11014-1

Trade Name: ULF 10	**Universal flux paste**	**F-SW 22 / DIN 8511**
1.) **IDENTIFICATION OF THE COMPANY/UNDERTAKING AND OF THE SUBSTANCE/MIXTURE**		
1.1) **Product identifier**	UNIVERSAL-LÖTFETT “ULF10”	
1.2.) **Relevant identified uses of the substance or mixture and uses advised against**		
Use of the substance/mixture:	Industrial use of processing aids. Fluxes Paste	
Uses advised against:	No identified use(s). Do not use for private purposes (household).	
1.3.) **Details of the supplier of the safety data sheet**		
Company: **Supplier:** **Address:**	**EDSYN GMBH EUROPA** Finkenweg 2 D 97892 Kreuzwertheim	 Tel.: 09342 - 6413 Fax: 09342 - 6417
1.4.) **Emergency telephone number**	Hospital	
2.) **HAZARDS IDENTIFICATION**		
2.1.) **Classification of the substance or mixture**		
Classification according to Directive 67/548/EEC or 1999/45/EC		
Indications of danger:	Xi - Irritant, N - Dangerous for the environment	
R phrases:	- Irritating to eyes, respiratory system and skin - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
Classification according to Regulation (EC) No. 1272/2008[CLP]		
Hazard categories:	Skin corrosion/irritation: Skin Corr. 1B Serious eye damage/ eye irritation: Eye Dam. 1 Specific target organ toxicity – single exposure: STOT SE 3 Hazardous to the aquatic environment: Aquatic Chronic 2	
Hazard Statements:	Causes severe skin burns and eye damage. May cause respiratory irritation Toxic to aquatic life with long lasting effects.	

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2.2.)	**Label elements**	
	Hazardous components which must be listed on the label	zinc chloride
	Signal word:	Danger
	Pictograms:	GHS05-GHS07-GHS09
		
	Hazard statements	**H314** Causes severe skin burns and eye damage. **H335** May cause respiratory irritation. **H411** Toxic to aquatic life with long lasting effects.
	Precautionary statements	**P260** Do not breathe dust/fume/gas/mist/vapours/spray. **P273** Avoid release to the environment. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P301+P330+P331** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. **P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. **P363** Wash contaminated clothing before reuse. **P304+P340** IF INHALED: Remove person to fresh air and keep comfortable for breathing. **P310** Immediately call a POISON CENTER/doctor. **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **P310** Immediately call a POISON CENTER/doctor. **P391** Collect spillage. **P403+P233** Store in a well-ventilated place. Keep container tightly closed. **P405** Store locked up. **P501** Dispose of contents/container to Dispose of this material and its container to hazardous or special waste collection point.
2.3.)	**Other hazards**	See attachted safety data sheets and/or usage instructions. No risk worthy of mention.
3.)	**<u>COMPOSTITION / INFORMATION ON INGREDIENTS</u>**	
3.1.)	**Chemical characterization** Mixture related information:	Paste, Fat. Data apply to the main component. Activator)

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3.2.) Mixtures

Hazardous components

Chemical name	Product identifier	Quantity	Classification according to Directive 67/548/EEC Classification according to Regulation (EC) No. 1272/2008 [CLP]
zinc chloride	CAS No. 7646-85-7 EC No. 231-592-0 Index No. 030-003-00-2 REACH No.	5-15%	C-Corrosive, Xn-Harmful, N-Dangerous for the environment, R22-34-50-53 Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H302, H314, H400, H410

Full text of R-, H- and EUH-phrases: see section 16.

Further information:	Contains: Fat., Emulsifiers >> No risks worthy of mention.

4.) FIRST AID MEASURES

4.1.) Description of first aid measures

After inhalation:	Provide fresh air. Medical treatment necessary.
After contact with skin:	After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
After contact with eyes:	After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, for at least 5 minutes, then consult an ophthalmologist immediately.
After ingestion:	Rinse mouth immediately and drink plenty of water. In case of persisting problems contact physician.
4.2.) Most important symptoms and effects, both acute and delayed	Rinse mouth immediately and drink plenty of water.
4.3.) Indication of any immediate medical attention and special treatment needed	Treat symptomatically. No known symptoms to date.

5.) FIRE-FIGHTING MEASURES

5.1.) Extinguishing media

Suitable extinguishing media:	Co-ordinate fire-fighting measures to the fire surroundings.
Unsuitable extinguishing media:	D powder.
5.2.) Special hazards arising from the substance or mixture	Non-flammable.
5.3.) Advice for fire fighters	In case of fire: Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

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Additional information:	Suppress vapours/gases/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
6.) ACCIDENTAL RELEASE MEASURES	
6.1.) Personal precautions, protective equipment and emergency procedures	Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. 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	Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.
6.4.) Reference to other section	Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13. Treat the recovered material as prescribed in the section on waste disposal. See protective measures under point 7 and 8.
7.) HANDLING AND STORAGE	
7.1.) Precautions for safe handling	
Advice on safe handling:	If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust. Do not breathe dust. Conditions to avoid: Inhalation of vapours or spray/mists.
Advice on protection against fire and explosion:	Not highly flammable.
Further information on handling:	Avoid contact with skin and eyes.
7.2.) Conditions for safe storage, including any incompatibilities	
Requirements for storage rooms and vessels:	Keep container tightly closed.
Advice on storage compatibility:	To follow: Storage class:
Further information on storage conditions	Protect against direct sunlight.
7.3.) Specific end use(s)	Surface active agent. Further information: refer to Technical Data Sheet.

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8.) EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1.) Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7646-85-7	Zinc chloride, fume	- -	1 2		TWA(8h) STEL(15min)	WEL WEL

Additional advice on limit values: Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2.) Exposure controls


Appropriate engineering controls: If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures: Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection: Suitable eye protection: googles. Safety glasses. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Hand protection: When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purpose, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Additional protection measures for the hands:
Hand protection: DIN EN 374
-CR (polychloroprenes, Chloroprene rubber).
Thickness of glove material: 0,65 mm
penetration time (maximum wearing period): > 120 Min.
-NBR (Nitrile rubber):
Thickness of glove material: 0,4 mm
penetration time (maximum wearing period): > 480 Min.
Breakthrough times and swelling properties of the material must be taken into consideration.
Take recovery periods for skin regeneration.
In the case of wanting to use the gloves again, clean them before taking off and air them well.
Use gloves only once.
When handling with chemical substances, protective gloves must be worn with the CE label including the four control digits.
Before using check leak tightness / impermeability.

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Skin protection:	Wear suitable protective clothing. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).
Respiratory protection:	In case of inadequate ventilation wear respiratory protection. [In case of inadequate ventilation] wear respiratory protection. Use appropriate respiratory protection. Use only respiratory protection equipment with CE-symbol including four digit test number. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used! Filtering device (full mask or mouthpiece) with filter: A
Environmental exposure controls:	No special measures are necessary.

9.) PHYSIKAL AND CHEMICAL PROPERTIES

9.1.) Information on basic physical and chemical properties

Physical state:	Paste
Colour:	white - light yellow
Odour:	characteristic
	Test method
pH-Value:	not applicable etc.:
Changes in the physical state	
Melting point:	> 60°C
Initial boiling point and boiling range:	> 300°C
Sublimation point:	not applicable etc.
Flash point:	not applicable
Flammability	
Solid:	not determined
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature	
Solid:	not determined
Gas:	not applicable
Decomposition temperature:	not determined
Oxidizing properties	Not oxidizing.
Vapour pressure:	Not determined
Density (at 20 °C):	ca. 0,9 g/cm³
Water solubility:	insoluble
Solubility in other solvents	Isopropyl alcohol, Ethanol
Partition coefficient:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined

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9.2.) Other information	
Solid content:	ca. 96%
10.) STABILITY AND REAKTIVITY	
10.1.) Reactivity	No risks worthy of mention.
10.2.) Chemical stability	Stability and reactivity: Yes.
10.3.) Possibility of hazardous reactions	No risks worthy of mention.
10.4.) Conditions to avoid	Keep away from heat.
10.5.) Incompatible materials	No data available.
10.6.) Hazardous decomposition products	Thermal decomposition can lead to the escape of irritating gases and vapours.
Further information	Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.
11.) TOXICOLOGICAL INFORMATION	
11.1.) Information on toxicological effects	
Toxicocinetics, metabolism and distribution:	No data available.

Acute toxicity

zinc chloride CAS No 7646-85-7

Exposure routes	Method	Dose	Species	Source
oral	LD50	350mg/kg	Rat	RTECS

Additional information on tests	This mixture is classified as hazardous according to 1999/45/EC.
12.) ECOLOGICAL INFORMATION	
12.1.) Toxicity	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. No data available.

zinc chloride CAS No 7646-85-7

Aquatic toxicity	Method	Dose	(h)	Species	Source
Acute fish toxicity	LC50	38mg/l	96	Danio rerio	IUCLID
Acute crustacea toxicity	EC50	0,33mg/l	48	Daphnia magna	IUCLID

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12.2.) Persistence and degradability	Avoid contact with skin and eyes.
12.3.) Bioaccumulative potential	On the basis of existing data about elimination/degradation and bio-accumulation potential longer term damage to the environment is unlikely.
12.4.) Mobility in soil	No data available.
12.5.) Results of PBT and vPvB assessment	This substance does not meet the criteria for classification as PBT or vPvB.
12.6.) Other adverse effects	No data available. Do not mix with other wastes.
Further information:	Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).
13.) DISPOSAL CONSIDERATIONS	
13.1.) Waste treatment methods	
Advise on disposal:	Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.
Waste disposal number of waste from residues/unused and used products:	**060313** WASTE FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of salts and their solutions and metallic oxides; solid salts and solutions containing heavy metals. Classified as hazardous waste.
Waste disposal number of contaminated packaging:	**150102** WASTE PACKAGING; ABSORBENTS WIPING CLOTHS; FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging.
Contaminated packaging:	Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.
14.) TRANSPORT INFORMATION	
14.1.) Land transport (ADR/RID) **UN number:**	UN 1759
UN proper shipping name:	CORROSIVE SOLID,N.O.S (ZINC CHLORIDE, ANHYDROUS)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8 

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Classification code:	C 10
Special Provisions:	274
Limited quantity:	5 kg
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E
14.2.) Inland waterways transport (ADN)	
UN number:	UN 1759
UN proper shipping name:	CORROSIVE SOLID,N.O.S (ZINC CHLORIDE, ANHYDROUS)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8
	
Classification code:	C 10
Special Provisions:	274
Limited quantity:	5 kg
Excepted quantity:	E1
14.3.) Marine transport (IMDG)	
UN number:	UN 1759
UN proper shipping name:	CORROSIVE SOLID,N.O.S (ZINC CHLORIDE, ANHYDROUS)
Transport hazard class(es):	8
Packing group:	III
Hazard label:	8
	
Special Provisions:	223, 274
Limited quantity:	5 kg
Excepted quantity:	E1
EmS:	F-A, S-B
Segregation group:	Heavy metals and their salts (including their organometallic compounds)
14.4.) Air transport (ICAO)	
UN number:	UN1759
UN proper shipping name:	CORROSIVE SOLID,N.O.S (ZINC CHLORIDE, ANHYDROUS)
Transport hazard class(es):	8

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Packing group:	III
Hazard label:	8
	
Special Provisions:	A3 A803
Limited quantity Passenger:	5 kg
Passenger LQ	Y845
Excepted quantity	E1
IATA-packing instructions - Passenger:	860
IATA-max. quantity - Passenger:	25 kg
IATA-packing instructions - Cargo:	864
IATA-max. quantity - Cargo:	100 kg
14.5.) Environmental hazards	
ENVIRONMENTALLY HAZARDOUS:	Yes
	
Danger releasing substance:	ZINC CHLORIDE, ANHYDROUS
14.6.) Special precautions for user	
Warning:	Strongly corrosive. Do not allow uncontrolled discharge of product into the environment.
14.7.) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC-Code	Not applicable etc.:
Other applicable information:	Discharge into the environment must be avoided.
15.) <u>REGULATORY INFORMATION</u>	
15.1.) Safety, health and environmental regulations/legislation specific for the substance or mixture	
EU regulatory information	
Additional information	To follow:850/2004/EC, 79/117/EEC, 689/2008/EC
National regulatory information	
Employment restrictions:	Observe employment restrictions for young people.
Water contaminating class (D):	3 – highly water contaminating
Additional information	The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.
15.2.) Chemical safety assessment	Chemical safety assessments for substances in this mixture were not carried out.

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16.)	**OTHER INFORMATION**	
	Abbreviations and acronyms	**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 of Dangerous Goods **IATA:** International Air Transport Association **GHS:** Globally Harmonized 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 **LC50:** Lethal concentration, 50% **LD50**: Lethal dose, 50%
	Relevant R-phrases (Number and full test)	**R 22** Harmful is swallowed. **R 34** Causes burns. **R 50** Very toxic to aquatic organisms. **R 53** May cause long-term adverse effects in the aquatic environment.
	Relevant H- and EUH-phrases (Number and full text)	**H302** Harmful if swallowed. **H314** Causes severe skin burns and eye damage. **H335** May cause respiratory irritation. **H400** Very toxic to aquatic life. **H410** Very toxic to aquatic life with long lasting effects. **H411** Toxic to aquatic life with long lasting effects.
	Further Information	The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.
	Revision date:	03.07.2013 / 22.05.2015 / 08.12.2015
	Revision No:	5.00

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor`s safety data sheet.)