

Manufacturer/distributor:		CREARTEC trend design-gmbh	
Product-No.:	18 091	name:	Soldering fluid "fruit acid" 100 ml
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01 Stoff-/Zubereitungs- und Firmenbezeichnung:

Commercial product name:	Soldering Fluid "fruit acid"
Manufacturer/distributor:	CREARTEC trend-design-gmbh
Street/POB-No.:	Lauenbühlstr. 59
State/postal code/city:	D 88 161 Lindenberg
Telephone/Telefax:	Tel. +49 83 81 80 74 00 – Fax +49 83 81 80 74 10
Emergency telephone number:	+49 75 22 79 76 60 or +49 83 81 80 74 00

02 Hazards identification:

- o **Classification of the substance or mixture:**
Classification according to Directive 67/548/EEC or 1999/45/EC
Indications of danger: C - Corrosive, N - Dangerous for the environment
R phrases: Causes burns.
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:
Acute toxicity: Acute Tox. 4
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: Harmful if swallowed.
Causes severe skin burns and eye damage. May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

- o **Label elements**

Hazardous components which must be listed on the label

Signal word: zinc chloride
Danger
Pictograms: GHS05 GHS07 GHS09



Hazard statements

H302 Harmful if swallowed.
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.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P331 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

- o **Other hazards**

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

03 Composition/information on ingredients:

- o **Chemical characterization:** Activator, Additive, Perfumes, fragrances in aqueous solution

- o **Hazardous components**

CAS No: 231-592-0
Index No: 7646-85-7
Chemical name: zinc chloride

Classification 67/548/EEC

C - Corrosive, Xn - Harmful, N - Dangerous for the environment R22-34-50-53

Classification (EC) 1272/2008

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.

o **Further Information**

The product is classified and labelled according to EC directives or corresponding national laws

04 First-aid measures:

Description of first aid measures

o **General information**

First aider: Pay attention to self-protection!

Move victim out of danger zone. Remove person to fresh air and keep comfortable for breathing.

Remove contaminated, saturated clothing immediately. Call a physician immediately.

o **After Inhalation**

Provide fresh air

o **After contact with skin**

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water.

Take off immediately all contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

o **After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist

o **After ingestion**

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Adverse human health effects and symptoms: Gastric perforation.

Call a physician immediately. Do not allow a neutralisation agent to be drunk.

o **Most important symptoms and effects, both acute and delayed**

No data available

No known symptoms to date.

o **Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. No data available

No known symptoms to date.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

No known symptoms to date.

05 Fire-fighting measures:

o **Extinguishing media**

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

D powder.

o **Special hazards arising from the substance or mixture**

Non-flammable.

o **Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

o **Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water

06 Accidental release measures:

o **Personal precaution, 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

o **Environmental precautions**

Do not allow to enter into surface water or drains.

o **Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal

o **Reference to other sections**

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

07 Handling and storage:

o **Precautions for safe handling**

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Not highly flammable.

o **Conditions for safe, storage, including any incompatibilities**

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on storage compatibility

To follow: Storage class

Further information on storage conditions

Always close containers tightly after the removal of product . Keep container tightly closed.

Protect against direct sunlight.

Keep away from sources of ignition - No smoking.

Keep container dry.

o **Specific end use(s)**

Fluxes

Surface active agent

08 Exposure controls and personal protection equipment:

o **Control parameters**

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7646-85-7	Zinc chloride, fume	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

Additional advice on limit values

No data available

o **Exposure controls**



o **Appropriate engineering controls**

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

o **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

o **Eye/face protection**

Suitable eye protection: goggles.

o **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 purposes, 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: 0,65mm

penetration time (maximum wearing period): >120min.

-NBR (Nitrile rubber):

Thickness of glove material: : 0,4mm

penetration time (maximum wearing period): : >480min.

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.

o **Skin protection**

Wear suitable protective clothing.

o **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

o **Environmental exposure controls**

No special measures are necessary.

09 Physical and chemical properties:o **Information on basic physical and chemical properties**

Physical state	liquid
Colour	colourless- light brown
Odour	characteristic (fruity (CITRUS))
pH- Value (at 20° C)	(1/10) = 3-5

o **Changes in the physical state**

Melting point (°C)	not determined
Initial boiling point/ boiling range (°C)	> 130° C
Softening point	not applicable etc
Flashpoint (°C)	not determined

Flammability:

Solid	not applicable
Gas	not applicable
Lower explosions limits	not applicable etc
Upper explosions limits	not applicable etc

Auto- ignition temperature

Solid	not applicable
Gas	not applicable
Decomposition temperature	not determined

Oxidizing properties

None	
Vapour pressure (at 20°C)	1 hPa
Vapour pressure	not determined
Density (at 20°C)	ca. 1,2 – 1,3 g/cm ³
Water solubility	completely miscible

Solubility in other solvents

	Not determined
Partition coefficient	not determined
Viscosity/ dynamic (at 20°C)	ca 15 mPa·s
Vapour density	not determined
Evaporation rate	not determined

o **Other information**

Solid content	not determined
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10 Stability and reactivity:o **Reactivity**

No risks worthy of mention.

o **Chemical stability**

Stability and reactivity: Yes

o **Possibility of hazardous reactions**

Violent reaction with: Oxidizing agents, strong.

Reacts violently with peroxides

Alkali metals

o **Conditions to avoid**

Keep away from heat.

o **Incompatible materials**

Violent reaction with: Oxidizing agents, strong. Reacts violently with peroxides.

Alkali metals.

May be corrosive to metals.

o **Hazardous decomposition products**

Thermal decomposition can lead to the escape of irritating gases and vapours.

Further information

No data available

11 Toxicological information:**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No data available

ATEmix calculated

ATE (oral) 1528, 4 mg/kg

Acute toxicity

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
7646-85-7	zinc chloride					
	oral	LD50	350	Rat	RTECS	

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12 Ecological information:o **Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name				
	Aquatic toxicity	Method Dose	[h] [d]	Species	Source
7646-85-7	zinc chloride				
	Acute fish toxicity	LC50 38 mg/l	96 h	Danio rerio	IUCLID
	Acute crustacea toxicity	EC50 0,33 mg/l	48 h	Daphnia magna	IUCLID

o **Persistence and degradability**

Avoid contact with skin and eyes .

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment .

o **Bioaccumulative potential**

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

o **Mobility in soil**

No data available

o **Results of PBT and vPvB assessment**

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

o **Other adverse effects**

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

o **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:o **Waste treatment methods****Advice 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 products

060313 WASTES 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 used product

060313 WASTES 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:o **Land transport (ADR/RID)**

UN number: UN 1840

UN proper shipping name: ZINC CHLORIDE SOLUTION

Transport hazard class(es): 8

Packing group: III

Hazard label: 8



Classification code: C1

Limited quantity: 5 L Excepted quantity: E1

Transport category: 3

Hazard No: 80

Tunnel restriction code: E

o **Inland waterways transport (ADN)**

UN number: UN 1840
 UN proper shipping name: ZINC CHLORIDE SOLUTION
 Transport hazard class(es): 8
 Packing group: III
 Hazard label: 8



Classification code: C1
 Limited quantity: 5 L
 Excepted quantity: E1

o **Marine transport (IMDG)**

UN number: UN 1840
 UN proper shipping name: ZINC CHLORIDE SOLUTION
 Transport hazard class(es): 8
 Packing group: III
 Hazard label: 8



Special Provisions: 223
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B
 Segregation group: heavy metals and their salts (including their organometallic compounds)

Air transport (ICAO)

UN number: UN 1840
 UN proper shipping name: ZINC CHLORIDE SOLUTION
 Transport hazard class(es): 8
 Packing group: III
 Hazard label: 8



Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

o **Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: ZINC CHLORIDE, ANHYDROUS

o **Special precautions for user**

Warning: strongly corrosive. Do not allow uncontrolled discharge of product into the environment.

o **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not classified for this carrier. not determined

Other applicable information

Discharge into the environment must be avoided.

15 Regulatory information:

o **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

Classification according to directive 67/548/EEC or 1999/45/EC:

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.

o **Chemical safety assessment**

16 Other information:o **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 for 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 text)

22 Harmful if swallowed.

34 Causes burns.

50 Very toxic to aquatic organisms.

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 .

o **Further informations**

The recommendations in this safety data sheet reflect the knowledge available to us on the date of going to print. They are intended to give you hints for the safe handling of the product mentioned in this safety data sheet during storage, processing, transport and waste disposal. This information cannot be transferred to other products. In those cases where the product mentioned in this safety data sheet is blended, mixed or processed with other materials or processed in any other way, the information contained in this safety data sheet cannot be related to the new material obtained in this way.