

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

· **1.1 Product identifier**

· **Trade name:** *Flux décapant pour zinc naturel*

· **Article number:** 847

· **Reference Safety data sheet Ref.** 847 - EN - FDS n°115b

· **UFI:** AQA2-J03A-R00C-FJ25

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

· **Sector of Use**

*SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites*

*SU21 Consumer uses: Private households / general public / consumers*

· **Product category** PC38 *Welding and soldering products, flux products*

· **Application of the substance / the mixture** *Brazing flux*

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

*GUILBERT EXPRESS*

*33, Avenue du Maréchal de Lattre de Tassigny*

*94127 FONTENAY SOUS BOIS Cedex*

*www.express-fds.fr*

· **Further information obtainable from:** *info@express.fr*

· **1.4 Emergency telephone number:**

*+33/825 800 251*

*Members of the public seeking specific information on poisons should contact:*

*In England and Wales: NHS 111 - dial 111*

*In Scotland: NHS 24 - dial 111*

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



*corrosion*

*Met. Corr.1 H290 May be corrosive to metals.*

*Skin Corr. 1B H314 Causes severe skin burns and eye damage.*

*Eye Dam. 1 H318 Causes serious eye damage.*



*environment*

*Aquatic Acute 1 H400 Very toxic to aquatic life.*

*Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.*



*STOT SE 3 H335 May cause respiratory irritation.*

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

*The product is classified and labelled according to the GB CLP regulation.*

· **Hazard pictograms**



GHS05



GHS07



GHS09

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 18.11.2022

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**Trade name: Flux décapant pour zinc naturel**

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- **Signal word** *Danger*

- **Hazard-determining components of labelling:**

zinc chloride

hydrogen chloride

- **Hazard statements**

H290 *May be corrosive to metals.*H314 *Causes severe skin burns and eye damage.*H335 *May cause respiratory irritation.*H410 *Very toxic to aquatic life with long lasting effects.*

- **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.*P260 *Do not breathe dusts or mists.*P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.*P310 *Immediately call a POISON CENTER/doctor.*P405 *Store locked up.*P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Additional information:**

Contains biocidal products: propan-2-ol

- **Emballages devant être pourvus d'une fermeture de sécurité pour les enfants.**

Whatever their capacity, the packaging must be fitted with child-resistant closures and comply with the standards: Reclosable packaging:

Standard EN ISO 8317

Non-reclosable packaging: CEN standard EN 862

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 7646-85-7 EINECS: 231-592-0 Reg.nr.: 01-2119472431-44-XXXX	zinc chloride ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302 Specific concentration limit: STOT SE 3; H335: C ≥ 5 %	25-50%
CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-XXXX	ethanediol ⚠ Acute Tox. 4, H302	2.5-10%
CAS: 12125-02-9 EINECS: 235-186-4 Reg.nr.: 01-2119487950-27-XXXX	ammonium chloride ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319	≥2.5-<10%

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CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-XXXX	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≤2.5%
CAS: 7647-01-0 EINECS: 231-595-7 Reg.nr.: 01-2119484862-27-XXXX	hydrogen chloride ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ STOT SE 3, H335 Specific concentration limits: Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % STOT SE 3; H335: C ≥ 10 %	≥1-≤2.5%

**· Non-hazardous components:**

CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	50-100%
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**· 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:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Drink plenty of water and provide fresh air. Call for a doctor immediately.  
If pH < 1.5 (concentrated solution), or solutions whose pH is not known, regardless of the amount absorbed, do not drink and do not attempt to induce vomiting to move quickly, if possible by ambulance in hospital for an assessment of caustic injuries of the upper digestive tract (oral cavity examination, endoscopy oesogastroduodenale), clinical and laboratory monitoring, and treatment if necessary.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Hydrogen chloride (HCl)  
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.

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Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· **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**

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about fire - and explosion protection:** Keep respiratory protective device available.

· **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:** Not required.

· **Further information about storage conditions:** Keep container tightly sealed.

· **Recommended storage temperature:** Storage temperature : Room temperature

· **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:**

**7646-85-7 zinc chloride**

WEL Short-term value: 2 mg/m<sup>3</sup>

Long-term value: 1 mg/m<sup>3</sup>

**12125-02-9 ammonium chloride**

WEL Short-term value: 20 mg/m<sup>3</sup>

Long-term value: 10 mg/m<sup>3</sup>

**107-21-1 ethanediol**

WEL Short-term value: 104\*\* mg/m<sup>3</sup>, 40\*\* ppm

Long-term value: 10\* 52\*\* mg/m<sup>3</sup>, 20\*\* ppm

Sk \*particulate \*\*vapour

**7647-01-0 hydrogen chloride**

WEL Short-term value: 8 mg/m<sup>3</sup>, 5 ppm

Long-term value: 2 mg/m<sup>3</sup>, 1 ppm  
(gas and aerosol mists)

**67-63-0 propan-2-ol**

WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm

Long-term value: 999 mg/m<sup>3</sup>, 400 ppm

· **DNELs**

7646-85-7 chlorure de zinc

1 mg/m<sup>3</sup> (worker) (en Zn, long term exposition)

· **PNECs**

7646-85-7 chlorure de zinc

0,0206 mg/l (Fresh water) (en Zn)

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· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.



Suitable respiratory protective device recommended.

· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

· **Material of gloves**

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 can not be calculated in advance and has therefore to be checked prior to the application. (Refer to standard EN-374).

· **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.

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Liquid

· **Colour:**

Colourless

· **Odour:**

Light

· **Melting point/freezing point:**

Not determined.

· **Boiling point or initial boiling point and boiling range**

197 °C

· **Flammability**

Not applicable.

· **Flash point:**

Not applicable.

· **Ignition temperature:**

410 °C

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· <b>Decomposition temperature:</b>	Not determined.
· <b>pH at 20 °C</b>	1.3
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	2.43 g/cm <sup>3</sup>
· <b>9.2 Other information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Liquid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	>1.5 %
· <b>VOC (EC)</b>	2.00 %
· <b>SADT (°C)</b>	
· <b>Evaporation rate</b>	Not determined.
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	May be corrosive to metals.
· <b>Desensitised explosives</b>	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 according to specifications.
- **10.3 Possibility of hazardous reactions** Violent reactions with strong alkalis and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Strong Bases
- **10.6 Hazardous decomposition products:**  
Hydrogen chloride (HCl)  
Ammonia

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### SECTION 11: Toxicological information

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

<b>LD/LC50 values relevant for classification:</b>		
Oral	LD50	2,669 mg/kg (rat)

<b>7646-85-7 zinc chloride</b>		
Oral	LD50	1,100 mg/kg (rat)
Inhalative	LC50/inh	1,260 mg/l (rat)

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **STOT-single exposure** May cause respiratory irritation.
- **11.2 Information on other hazards**

<b>Endocrine disrupting properties</b>
None of the ingredients is listed.

### SECTION 12: Ecological information

- **12.1 Toxicity**

<b>Aquatic toxicity:</b>
<b>7646-85-7 zinc chloride</b>
CL50 0.169 mg/l (96h) (Fish)
CE50 1.2 mg/l (48h) (daphnia)
CI50 0.136 mg/l (algae)

- **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**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Remark:** Very toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**
- **ADR, IMDG, IATA**

UN1760

- **14.2 UN proper shipping name**
- **ADR**

1760 CORROSIVE LIQUID, N.O.S. (ZINC CHLORIDE, HYDROCHLORIC ACID), ENVIRONMENTALLY HAZARDOUS

- **IMDG**

CORROSIVE LIQUID, N.O.S. (ZINC CHLORIDE, HYDROCHLORIC ACID), MARINE POLLUTANT

- **IATA**

CORROSIVE LIQUID, N.O.S. (ZINC CHLORIDE, HYDROCHLORIC ACID)

- **14.3 Transport hazard class(es)**

- **ADR, IMDG**



- **Class**
- **Label**

8 Corrosive substances.

8

- **IATA**



- **Class**
- **Label**

8 Corrosive substances.

8

- **14.4 Packing group**

- **ADR, IMDG, IATA**

II

- **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: zinc chloride

- **Marine pollutant:**

Yes

- **Special marking (ADR):**

Symbol (fish and tree)

Symbol (fish and tree)

- **14.6 Special precautions for user**

Warning: Corrosive substances.

- **Hazard identification number (Kemler code):**

80

- **EMS Number:**

F-A,S-B

- **Stowage Category**

B

- **Stowage Code**

SW2 Clear of living quarters.

- **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Limited quantities (LQ)**

1L

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· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1760 CORROSIVE LIQUID, N.O.S. (ZINC CHLORIDE, HYDROCHLORIC ACID), 8, II, ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **National regulations:**
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

### 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.

- **Relevant phrases**  
H225 Highly flammable liquid and vapour.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.
- **Abbreviations and acronyms:**  
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)  
DNEL: Derived No-Effect Level (UK REACH)  
PNEC: Predicted No-Effect Concentration (UK REACH)  
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 – Category 2  
Met. Corr. 1: Corrosive to metals – Category 1  
Acute Tox. 4: Acute toxicity – Category 4

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*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*

*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

*Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

*Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

**\* Data compared to the previous version altered.**

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