

# D\_Flux - F 25

## Safety data sheet

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Code: **D\_Flux**  
Product name: **F 25**  
Chemical name and synonym: **EN 1045:1999 - FSH10**

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

Intended use: **Flux for Silver Brazing Alloys.**

Identified Uses	Industrial	Professional	Consumer
Brazing Technology	✓	-	-

#### 1.3. Details of the supplier of the safety data sheet

Name: **SALDFLUX SRL SOCIETA A SOCIO UNICO**  
Full address: **Via Privata Friuli 5**  
District and Country: **20090 Pieve Emanuele Fraz.Fizzonasco (MI) Italia**  
Tel.: **0039 - 02 - 90781812**  
Fax: **0039 - 02 - 90784933**

e-mail address of the competent person responsible for the Safety Data Sheet: **quality@saldflux.net**

#### 1.4. Emergency telephone number

For urgent inquiries refer to: **Ospedale di Niguarda (Milano) - 02 - 66101029**

### SECTION 2. Hazards identification.

#### 2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

##### Hazard classification and indication:

Acute toxicity, category 4	H302	Harmful if swallowed.
Eye irritation, category 2	H319	Causes serious eye irritation.

#### 2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Warning**

Hazard statements:

<b>H302</b>	Harmful if swallowed.
<b>H319</b>	Causes serious eye irritation.

Precautionary statements:

<b>P102</b>	Keep out of reach of children.
<b>P103</b>	Read label before use.
<b>P201</b>	Obtain special instructions before use.
<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P273</b>	Avoid release to the environment.

# D\_Flux - F 25

## SECTION 2. Hazards identification. ... / >>

<b>P280</b>	Wear protective gloves / clothing and eye / face protection.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P308+P313</b>	IF exposed or concerned: Get medical advice / attention.
<b>Contains:</b>	POTASSIUM TETRAFLUOBORATE

### 2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

**Contains:**

Identification.	Conc. %.	Classification 1272/2008 (CLP).
<b>POTASSIUM METABORATE</b>		
CAS. 13709-94-9	54 - 56	Eye Irrit. 2 H319
EC. 237-262-2		
INDEX.		
<b>POTASSIUM TETRAFLUOBORATE</b>		
CAS. 14075-53-7	25 - 26	Aquatic Chronic 4 H413
EC. 237-928-2		
INDEX.		
<b>POTASSIO TETRABORATO</b>		
CAS. 12045-78-2	20 - 22	Repr. 2 H361d
EC.		
INDEX. 215-575-5		

Note: Upper limit is not included into the range.  
The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures.

Devono essere prese delle precauzioni qualora durante l'uso si generino polveri o fumi che possono essere inalati o respirati

### 4.1. Description of first aid measures.

In caso di inalazione: rimuovere con aria fresca. se provoca problemi respiratori, somministrare ossigeno. In caso di mancanza di respiro, usare la respirazione artificiale.

In caso di contatto con gli occhi: Eliminare eventuali lenti a contatto. Lavarsi immediatamente ed abbondantemente con acqua per almeno 30/60 minuti, aprendo bene le palpebre. Consultare subito un medico.

### 4.2. Most important symptoms and effects, both acute and delayed.

La sostanza non irrita la pelle. In caso di contatto con la pelle, togliersi i vestiti contaminati e lavarsi lungamente con acqua fresca.

In caso del persistere dell'irritazione agli occhi, consultare un medico.

In ogni caso Per sintomi ed effetti dovuti alle sostanze contenute, vedere al cap. 11.

### 4.3. Indication of any immediate medical attention and special treatment needed.

La sostanza non causa intossicazione. Non indurre il vomito se non assistiti da un medico. Se i sintomi persistono, consultare un medico.

## SECTION 5. Firefighting measures.

### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Choose the most appropriate extinguishing equipment for the specific case.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

The product is neither flammable nor combustible.

# D\_Flux - F 25

## SECTION 5. Firefighting measures. ... / >>

### 5.3. Advice for firefighters.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures.

### 6.1. Personal precautions, protective equipment and emergency procedures.

Provide to wear gears suitable to complete protection keeping away persons not suitably protected Guarantee effective ventilation.

### 6.2. Environmental precautions.

Avoid any type of pouring into sewer systems or soil .

### 6.3. Methods and material for containment and cleaning up.

Cleaning methods Collect material by means of mechanical equipment to avoid to developing powders. Collect into a container of material consistent with the product .Wash area with of water

### 6.4. Reference to other sections.

See Section 13.

## SECTION 7. Handling and storage.

Before handling the product, consult all the other sections of this material safety data sheet.

### 7.1. Precautions for safe handling.

Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

### 7.2. Conditions for safe storage, including any incompatibilities.

Keep the product in originale containers or anyway in clearly labelled ones. Store the containers sealed, in a well ventilated place, away from direct sunlight.

## SECTION 8. Exposure controls/personal protection.

### 8.1. Control parameters.

Regulatory References:

ITA Italia Decreto Legislativo 9 Aprile 2008, n.81

#### POTASSIO TETRABORATO

#### Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV	ITA	1			

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. Personal protection equipment must comply with the rules in force indicated below.

#### HAND PROTECTION

Protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

#### EYE PROTECTION

Use of protective airtight goggles (ref. standard EN 166) recommended.

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN ISO 20344). Wash body with soap and water after removing overalls.

# D\_Flux - F 25

## SECTION 8. Exposure controls/personal protection. ... / >>

### RESPIRATORY PROTECTION

If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear an FFP3 (ref. standard EN 14387/EN 143) type half mask.

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

### ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

## SECTION 9. Physical and chemical properties.

### 9.1. Information on basic physical and chemical properties.

Appearance		powder
Colour		white
Odour		mild
Odour threshold.		Not applicable.
pH.		8,0
Melting point / freezing point.	>	600 °C.
Initial boiling point.		Not applicable.
Boiling range.		Not applicable.

## SECTION 10. Stability and reactivity.

### 10.1. Reactivity.

Information not available.

### 10.2. Chemical stability.

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.3. Possibility of hazardous reactions.

Information not available.

### 10.4. Conditions to avoid.

Heating over melting point.

### 10.5. Incompatible materials.

Mineral Acid.

### 10.6. Hazardous decomposition products.

In the event of thermal decomposition vapours potentially dangerous to health may be released.

## SECTION 11. Toxicological information.

### 11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: ingestion of this product is harmful. Even small amounts of product may cause serious health problems (stomach pain, nausea, sickness, diarrhoea).

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

### POTASSIUM TETRAFLUOBORATE

LD50 (Oral). > 5,8 mg/Kg

# D\_Flux - F 25

## SECTION 12. Ecological information.

### 12.1. Toxicity.

POTASSIUM TETRAFLUOBORATE  
LC50 - for Fish. > 760 mg/l/96h

### 12.2. Persistence and degradability.

Information not available.

### 12.3. Bioaccumulative potential.

Information not available.

### 12.4. Mobility in soil.

Information not available.

### 12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

### 12.6. Other adverse effects.

Information not available.

## SECTION 13. Disposal considerations.

### 13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## SECTION 14. Transport information.

### 14.1. UN number.

Not applicable.

### 14.2. UN proper shipping name.

Not applicable.

### 14.3. Transport hazard class(es).

Not applicable.

### 14.4. Packing group.

Not applicable.

### 14.5. Environmental hazards.

Not applicable.

### 14.6. Special precautions for user.

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

# D\_Flux - F 25

## SECTION 15. Regulatory information.

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

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.  
None.

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

## SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Eye Irrit. 2</b>	Reproductive toxicity, category 2
<b>Aquatic Chronic 4</b>	Eye irritation, category 2
<b>H361d</b>	Hazardous to the aquatic environment, chronic toxicity, category 4
<b>H319</b>	Suspected of damaging the unborn child.
<b>H413</b>	Causes serious eye irritation.
	May cause long lasting harmful effects to aquatic life.

#### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit

# D\_Flux - F 25

**SECTION 16. Other information. ... / >>**

- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 453/2010 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 04 / 05 / 07 / 08 / 09 / 11 / 12 / 14 / 16.