

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 PRODUCT IDENTIFIER

TRADE NAME	REGULATION	DESCRIPTION
GSHT5 FLUX	AWS FB3-A FED.SPEC.O-F-499 TYPE B AMS 3410	FLUX POWDER

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

#### Identified uses

Powder desoxidizer for metals, for brazing with silver alloys having liquidus temperature up to 850 °C..

#### Uses advised against

Do not use for other purposes other than those described in the product.

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

GS METAL JOINING LTD  
 154 MANDALAY ROAD, PLEASLEY, MANSFIELD, NG19 7TJ  
 Tel: 01623 707 954  
 Email: enquiries@gsmetaljoining.co.uk  
 Web: www.gsmetaljoining.co.uk

### 1.4 Emergency telephone number.

01623 707 954

### Availability

Monday to Friday from 09:00 to 17:00h.

## 2. HAZARDS IDENTIFICATION

### 2.1 Compound classification according to EC directive 1272/2008/EC (CLP)

Acute Tox. 3, H301  
 Repr. 1B, H360FD  
 Met. Corr. 1, H290,  
 Skin Corr. 1A, H314  
 Toxic if swallowed  
 Toxic for reproduction  
 Causes severe skin burns and eye damage

### 2.2 Label elements.



### 2.3 Other hazards.

Fumes emitted when heated may irritate the respiratory tract.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 List of hazardous substances and/or with limit exposure values in the compound

Substance	CAS	EC	Directive 67/548/EEC classification	CLP Classification	Content
Potassium Hydroxide	1310-58-3	215-181-3	Xn, R22; C, R35	Met. Corr. 1 Acute Tox. 4 Skin Corr. 1A H290, H302, H314	10-25%
Potassium Bifluoride	7789-29-9	232-156-2	T, R25; C, R34	Acute Tox. 3 Skin Corr. 1B H301, H314	25-40%
Boric acid	10043-35-3	233-139-2	Not classified	Repr. 1B, H360FD	35-60%

## 4. FIRST AID MEASURES

### 4.1 Skin Contact

Immediately remove contaminated clothing.

Immediately rinse thoroughly with abundant running water and use soap on body areas that came or may have come into contact with the product, even if only suspected.

### 4.2 Eye contact

Immediately and thoroughly rinse with running water and open eyelids for at least 10 minutes; protect eyes with sterile gauze or a clean, dry tissue.

Seek medical attention.

### 4.3 Ingestion

Rinse mouth with water. Do not induce vomiting. Seek medical attention

### 4.4 Inhalation

Transport the injured party outdoors.

Check breathing and, in the event of difficulty, seek medical attention.

## 5. FIRE FIGHTING MEASURES

### 5.1 Suitable extinguishers

Carbon dioxide, Foam, Powder, Water mist



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Revision 02

Revision date: 15/10/2018



According to Regulation (EU) 2015/830, amending Annex II of Regulation (EC) No1907/2006 (REACH)

### 5.2 Unsuitable extinguishers

Water if in limited quantities

### 5.3 Hazardous combustion gases

Alkaline oxides

### 5.4 Recommendations for firefighters

Use fire fighting means and protective devices suited to the size of the fire and other materials found in the concerned area.  
Wear breathing apparatus indoors.

## 6. MEASURES IN THE EVENT OF ACCIDENTAL LEAKS

### 6.1 Individual precautions

Wear gloves and protective clothing..

### 6.2 Environmental precautions:

If the product leaks into a water course, sewer or has contaminated the soil or vegetation, alert the local authorities.

### 6.3 Cleaning methods:

If the product is humid, collect with mechanical means. If dry, vacuum, avoiding dispersion in the environment.

## 7. HANDLING AND STORAGE

### 7.1 Handling precautions:

Do not eat, drink or smoke during work.  
Avoid direct contact with the product as much as possible. Handle in well-ventilated rooms or use localised ventilation.  
To limit exposure, see following paragraph 8.

### 7.2 Incompatible materials:

Glass, enamel, strong acids. Also see following paragraph 10.

### 7.3 Storage conditions:

Store the product in its original containers, always well-closed. Install a restraint system for any accidental leaks.

### 7.4 Room indication::

Cool and adequately ventilated.  
Provide general or localised ventilation to keep the environmental concentration under the exposure limit.

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

### 8.1 Precautions:

Analyse the work processes, identify potential powder and/or fume exposure situations and implement consequent technical measures (localised exhaust and/or adequate ventilation) to keep exposure levels under any exposure limits.



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### 8.2 Respiratory protection:

In work situations where respiratory exposure is possible, wear a mask or semi-mask suited for powder and fumes (ref. UNI EN 149 and UNI EN 371 standards).

### 8.3 Hand protection:

Wear waterproof protective gloves (i.e.: PVC, neoprene, rubber). The limit duration of individual devices must take the entity and duration of exposure into account. (ref. UNI EN 374-1, 374-2, 374-3 standards).

### 8.4 Eye protection:

Wear safety goggles or protective visors for work that could cause accidental eye contact (ref. UNI EN 166 standard).

### 8.5 Skin protection:

Wear clothing that fully protects skin.

### 8.6 Limit exposure values (TLV-TVA ACGIH)

To supplement the limits in Legislative Decree 81/2008 appendix XXXVIII and the appendix to EC directive 39/2000, ACGIH TLV references are used (American Conference of Governmental Industrial Hygienists) as defined below:

- Inhalable dusts: 10 mg/m<sup>3</sup> (TLV-TWA)
- Breathable dusts: 3 mg/m<sup>3</sup> (TLV-TWA)
- Borates (inorganic compounds): 2 mg/m<sup>3</sup> (TLV-TWA)
- Fluoride acid: 2 mg/m<sup>3</sup> (TLV-TWA)

### 8.7 Environmental exposure control.

Localised ventilation systems must be equipped with suitable pollutant reduction systems before air emission and authorised according to current national and local regulations.

Waste water containing product and residue must be collected and not conveyed in sewers or bodies of water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Solid pulverulent

Odour: Odourless

Melting point: 550°±850° C

Spontaneous combustion point: Non-combustible

Colour: White

Water solubility: Soluble

Flash point: Non flammable

Explosive limit: Non explosive

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable in normal conditions

### 10.2 Chemical stability

Stable in normal conditions

It decomposes over the melting point and frees alkaline fumes

### 10.3 Hazardous reaction potential

When in contact with strong acids, it reacts in a strongly exothermic way and releases toxic gasses.

### 10.4 Conditions to be avoided:

Stable in normal conditions. Avoid temperatures over the melting point.

### 10.5 Incompatible materials:

When in contact with strong acids, it reacts in a strongly exothermic way and releases toxic gasses.

### 10.6 Hazardous decomposition products:

In the event of fire, it releases alkaline fumes following decomposition

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Acute toxicity

Toxicological data on the compound as such are not available.

Ingestion and absorption effects of preparation components: nausea, vomit, diarrhoea, abdominal cramps, rash injuries of skin and mucosa. Additional symptoms include: circulatory failure, tachycardia, cyanosis, delirium, convulsions and coma.

### 11.2 Other toxic effects

The preparation contains boric acid, a category 1 reproduction toxic substance that has a teratogenic effect on man, damages human fertility and causes a toxic effect on foetus development.

## 12. ECOLOGICAL INFORMATION

Apply standard practices for good workmanship when using the product, preventing its dispersal into the environment.  
Eco-toxicological data on the compound as such are not available.

## 13. DISPOSAL CONSIDERATIONS

Eliminate residue as special waste according to national and local regulations.  
Eliminate packaging as special waste according to national and local regulations.

## 14. TRANSPORT INFORMATION

### 14.1 Road/Railway (ADR/RID)

UN 1740, Hydrogenfluorides, solid n.o.s., 8, III, (E)  
Limited quantities exempted pursuant to par. 3.4 of the ADR in force: 5 kg

### 14.2 By sea (IMDG)

UN 1740, Hydrogenfluorides, solid, n.o.s., 8, III

### 14.3 By air (ICAO)

UN 1740, Hydrogenfluorides, solid, n.o.s., 8, III

## 15. REGULATORY INFORMATION

### 15.1 Hazard classification



H sentences:

H301: Toxic if swallowed

H360: It may damage fertility. May damage the unborn child. H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage

### 15.2 Persistent, bio-accumulative and toxic substances

PBT or vPvB substances (persistent, bio-accumulative and toxic) are not identifiable according to the criteria in art. 31, p. 3, lett. b) and appendix XII of EC Regulation 1907/2006.

### 15.3 Substances of Very High Concern

Boric Acid is included in the list of substances of very high concern (SVHC) published by ECHA in compliance with article 59, paragraph 10, of Regulation no. 1907/2006.

## 16. OTHER INFORMATION

Data on product hazardousness were prepared according to the provisions in chapter IV of EC Regulation 1907/2006 (Regulation concerning the registration, evaluation, authorisation and restriction of chemical substances (REACH), which establishes a European Agency for chemical substances, that amends directive 1999/48/EC and that repeals EEC Council regulation nr. 793/93 and EC Commission regulation nr. 1488/94, as well as Council directive 76/769/EEC and Commission directives 91/155/CEE, 93/67/CEE, 93/105/CE and 2000/21/CE).

The product classification refers to the EC Regulation no. 1272/2008 (Regulation on the classification, labelling and packaging of substances and mixtures that modifies and repeals the directives no. 67/548/EEC and 1999/45/EC and amends regulation (EC) no. 1907/2006)

The information in this sheet, where not resulting from product tests, were taken from the following national and international publication sources:

- ISS, Hazardous substance database
- CE, European chemical Substances Information System
- WHO/IPCS, International Chemical Safety Cards
- IARC, Monographs on the Evaluation of Carcinogenic Risks to Humans
- ACGIH, TLV and BEIs

This sheet voids and substitutes any previous edition.

## NOTES

This information is based on the knowledge we have so far. This SDS refers exclusively to this product. All chemical substances in this product have been reported or are exempt from notification under notification to the EC laws. Information in this SDS is based on the available published sources and is believed to be accurate. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application. The specifications of this safety data sheet describes the safety requirements of our product, this is not a guarantee of characteristics. They are based on current state.