

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

- **Product identifier**
- **Trade name: GENERAL BRAZING FLUX - 500G**
- **Article number: 1040/25**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Product category PC38** Welding and soldering products (with flux coatings or flux cores.), flux products
- **Application of the substance / the preparation** Brazing flux
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Specialised Welding Products Ltd  
Unit 1 Farringdon Industrial Centre,  
Farringdon,  
Nr. Alton  
GU34 3DD
- **Emergency telephone number: 01420 588180**

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R60-61: May impair fertility. May cause harm to the unborn child.



Xn; Harmful

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**

T Toxic

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

boric acid

potassium fluoride

- **Risk phrases:**

60 May impair fertility.

61 May cause harm to the unborn child.

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

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20/21/22 Also harmful by inhalation, in contact with skin and if swallowed.

**· Safety phrases:**

53 Avoid exposure - obtain special instructions before use.

20 When using do not eat or drink.

22 Do not breathe dust.

36/37 Wear suitable protective clothing and gloves.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

60 This material and its container must be disposed of as hazardous waste.









**· Additional information:**

Presence of Substances of Very High Concern (SVHC) according to REACH Regulation terms.

**· Other hazards** No further relevant information available.**· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.

### 3 Composition/information on ingredients

**· Chemical characterization: Mixtures****· Description:** Mixture of the substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 85392-66-1 EINECS: 286-925-2	potassium difluorodihydroxyborate(1-)  Xn R22  Acute Tox. 4, H302	20-50%
CAS: 1332-77-0 EINECS: 215-575-5	potassium tetraborate  Xn R62-63 Repr. Cat. 3  Repr. 2, H361fd	10-30%
CAS: 10043-35-3 EINECS: 233-139-2 Reg.nr.: 01-2119486683-25-xxxx	boric acid  T Repr. Cat. 2 R60-61  Repr. 1B, H360FD	10-30%
CAS: 7789-23-3 EINECS: 232-151-5	potassium fluoride  T R23/24/25  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	10-30%

**· SVHC**

10043-35-3 | boric acid

**· Additional information**This product contains a substance listed on the list of candidate substances according to the article 59 of the Regulation n°1907 / 2006 ("REACH") at a concentration  $\geq 0,1$  % by weight.

For the wording of the listed risk phrases refer to section 16.

### 4 First aid measures

**· Description of first aid measures****· General information**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**· After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably on their side 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. If symptoms persist, consult a doctor.

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- **After swallowing**  
Do NOT induce vomiting, do NOT drink, seek medical advice  
Look for a medical aid immediately and show him the label or this sheet.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Firefighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** Hydrogen fluoride (HF)
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.

**7 Handling and storage**

- **Handling**
- **Precautions for safe handling**  
Thorough dedusting.  
Ensure good ventilation/extraction at the workplace.  
Open and handle receptacle with care.  
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **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:**  
Advised preservation period under normal storage conditions: 6 months  
Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

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- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**14075-53-7 potassium tetrafluoroborate (10-30%)**

WEL Long-term value: 2.5 mg/m<sup>3</sup>  
as F

**7789-23-3 potassium fluoride (10-30%)**

WEL Long-term value: 2.5 mg/m<sup>3</sup>  
as F

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **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.

Store protective clothing separately.

Avoid contact with the eyes and skin.

- **Breathing equipment:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use an air-fed respirator.

- **Protection of hands:**

Protective gloves.

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

Due to a lack of 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

- **Glove material**

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.

- **Penetration time of glove material**

The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Tightly sealed goggles.

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

**Form:** Powder

**Colour:** White

- **Odour:** Odourless

- **Odour threshold:** Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

**Melting point/Melting range:** undetermined

**Boiling point/Boiling range:** undetermined

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· <b>Flash point:</b>	Not applicable
· <b>Flammability (solid, gaseous)</b>	Not determined.
· <b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
· <b>Self igniting:</b>	Product is not self igniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not applicable.
· <b>Density:</b>	Not determined
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Slightly soluble
· <b>Segregation coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>dynamic:</b>	Not applicable.
<b>kinematic:</b>	Not applicable.
<b>Organic solvents:</b>	0.0 %
<b>Solids content:</b>	100.0 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Hydrogen fluoride

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

**1332-77-0 potassium tetraborate**

Oral LD50 3500-4100 mg/kg (rat)

**10043-35-3 boric acid**

Oral LD50 2660 mg/kg (rat)

**7789-23-3 potassium fluoride**

Oral LD50 245 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.

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- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Others datas concerning CMR effects**  
Can alter the health.  
Risk of harmful effects for the child during the pregnancy.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.

Type of test	Effective concentration	Method	Assessment
<b>1332-77-0 potassium tetraborate</b>			
CL50	133 mg/l	(daphnia) (en bore (B) - 48h - daphnia magna straus)	
CL50 / 96h	40 mg/l	(fish) (en bore (B) - limanda limanda)	
<b>10043-35-3 boric acid</b>			
CE50 / 48h	133 mg/l	(daphnia)	
CL50 / 96h	50-100 mg/l	(fish) (Oncorhynchus mykiss)	
<b>7789-23-3 potassium fluoride</b>			
CE50	95 mg/l	(algae) (96h, desmodesmus subspicatus)	
	270 mg/l	(daphnia)	
CL50	64 mg/l	(fish) (240h, oncorhynchus mykiss)	

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**



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

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

· <b>UN-Number</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b> · <b>ADR, ADN, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b> · <b>ADR, ADN, IMDG, IATA</b> · <b>Class</b>	Void
· <b>Packing group</b> · <b>ADR, IMDG, IATA</b>	Void
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

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### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **National regulations**
  - **Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.**
  - **Substances of very high concern (SVHC) according to REACH, Article 57**
- |            |            |
|------------|------------|
| 10043-35-3 | boric acid |
|------------|------------|
- **Customs Combined Nomenclature : 38.10.90.90.00**
  - **Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

### 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**
- |           |  |
|-----------|--|
| H301      | Toxic if swallowed.  |
| H302      | Harmful if swallowed.  |
| H311      | Toxic in contact with skin.  |
| H331      | Toxic if inhaled.  |
| H360FD    | May damage fertility. May damage the unborn child.                       |
| H361fd    | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| R22       | Harmful if swallowed.  |
| R23/24/25 | Toxic by inhalation, in contact with skin and if swallowed.              |
| R60       | May impair fertility.  |
| R61       | May cause harm to the unborn child.                                      |
| R62       | Possible risk of impaired fertility.                                     |
| R63       | Possible risk of harm to the unborn child.                               |
- **Department issuing MSDS: Technical service**
  - **Contact:**
- Vincent Francon
- **\* Data compared to the previous version altered.**