

Safety Data Sheet

Aluminium Brazing Flux Powder

according to 1907/2006/EC, Article 31

Part No: 7521



Date: 08/10/2015

Page No: 1 of 8

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

- **1.1 Product identifier**
 - Trade name: **Super 6 Aluminium Brazing Flux Powder**
 - Article number: **7521**
- **1.2 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 mixture **Brazing flux**
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Specialised Welding Products Ltd
Unit 1, Farringdon Industrial Centre
Farringdon, Nr Alton, Hants GU34 3DD
Tel: +44 (0)1420 588180
Fax: +44 (0)1420 588184
www.specialisedwelding.co.uk
 - Information department: Email: sales@swp.uk.net
 - 1.4 Emergency telephone number: +44 (0)1420 588180 (office hours only)

SECTION 2: Hazards identification

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



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalative.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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 CLP regulation.
 - Hazard pictograms **GHS05, GHS07, GHS08, GHS09**
 - Signal word **Danger**
 - Hazard-determining components of labelling:
lithium chloride
zinc chloride
potassium hexafluoroaluminate
ammonium fluoride
 - Hazard statements
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.



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H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalative.

H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/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.

· **2.3 Other hazards** No further relevant information available.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

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

· **Dangerous components:**

CAS: 7447-41-8 EINECS: 231-212-3	lithium chloride ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 60304-36-1 EINECS: 262-153-1	potassium fluoroaluminates ⚠ STOT RE 2, H373; ⚠ Eye Irrit. 2, H319	10-25%
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; STOT SE 3, H335	10-25%
CAS: 12125-01-8 EINECS: 235-185-9	ammonium fluoride ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	3-<10%

· **Additional information** For the wording of the listed risk 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.

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. Then consult a doctor.

· **After swallowing** Do NOT induce vomiting, do NOT drink, seek medical advice

· **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.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose of 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**
Provide suction extractors if dust is formed.
Thorough dedusting.
Ensure good ventilation/extraction at the workplace.
Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **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 receptacle tightly sealed.
Advised preservation period under normal storage conditions: 6 months.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

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

7646-85-7 zinc chloride (10-25%)

WEL	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
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12125-01-8 ammonium fluoride (3-<10%)	
WEL	Long-term value: 2.5 mg/m ³ as F
· DNELs	
7646-85-7 zinc chloride	
Oral	DNEL 0.83 mg/kg bw/day (user) (long term & systemic effects)
Dermal	DNEL 8.3 mg/kg bw/day (user) (long term & systemic effects) 8.3 mg/kg bw/day (worker) (long term & systemic effects)
Inhalative	DNEL 1.3 mg/m ³ (user) 1 mg/m ³ (worker) (long term & systemic effects)
· PNECs	
7646-85-7 zinc chloride	
PNEC	0.0206 mg/l (Fresh water) (en Zn) 0.1 mg/l (STP microorganismes station d'eaux usées) 0.0061 mg/l (Sea water) 117.8 mg/kg (sediment) (fresh water) sediment sea water : 56.5mg/kg 35.6 mg/kg (soil)
· Additional information: The lists that were valid during the creation were used as basis.	
· 8.2 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. Avoid contact with the eyes and skin.	
· Breathing equipment: Suitable respiratory protective device recommended. Use suitable respiratory protective device in case of insufficient ventilation.	
· 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.	
SECTION 9: Physical and chemical properties	
· 9.1 Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Powder

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· 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
· Flash point:	Not applicable
· Flammability (solid, gaseous)	Not determined.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Self igniting:	Product is not self igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20 °C:	1 hPa
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Slightly soluble
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Organic solvents:	0.0 %
Solids content:	100.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

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

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

7646-85-7 zinc chloride

Oral	LD50	1100-1260 mg/kg (rat)
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Inhalative	LC50	1260 mg/l (rat) (30min)
60304-36-1 potassium fluoroaluminates		
Oral	LD50	>2000 mg/kg (rat)

· **Primary irritant effect:**

· **Skin corrosion/irritation** Caustic effect on skin and mucous membranes.

· **Serious eye damage/irritation** Strong caustic effect.

· **Respiratory or skin sensitisation** No sensitising 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

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and danger of perforation of esophagus and stomach.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Type of test** Effective concentration Method Assessment

7646-85-7 zinc chloride

CE50 0.28 mg/l (algae) (72h, as Zn, *selenastrum capricornutum*)

CE50 / 48h 0.86 mg/l (daphnia) (as Zn, *ceriodaphnia dubia*)

L(E)C 21 mg/L (fish)

12125-01-8 ammonium fluoride

L(E)C 364 mg/L (fish) (96h)

60304-36-1 potassium fluoroaluminates

CE50 / 48h 22.9 mg/l (daphnia) (*daphnia magna*)

· **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.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water danger 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.

Toxic for aquatic organisms

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**



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



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· **European waste catalogue**

Must apply in all cases all local, regional and national laws and European directives. The end user must determine the specific code of waste for each industry using the appropriate European Code European Waste Catalogue. It is recommended that all details are specified by the responsible waste.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN3077

· **14.2 UN proper shipping name**

· **ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE), MARINE POLLUTANT
· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE)

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

· **Marine pollutant:** Product contains environmentally hazardous substances: zinc chloride
Yes
Symbol (fish and tree)
· **Special marking (ADR):** Symbol (fish and tree)
· **Special marking (IATA):** Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.
· **Danger code (Kemler):** 90
· **EMS Number:** F-A,S-F
· **Segregation groups** Acids

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

Not applicable.

· **Transport/Additional information:**

· **ADR**
· **Limited quantities (LQ)** 5 kg
· **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g
· **Transport category** 3
· **Tunnel restriction code** E

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· **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

5 kg

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

- **UN "Model Regulation":**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC CHLORIDE), 9, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **National regulations**

- **Technical instructions (air):**

Class	Share in %
III	<10

- **Water hazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

- **Customs Combined Nomenclature :** 38.10.90.90.00

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalative.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

- **Abbreviations and acronyms:**

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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