

Safety Data Sheet

according to WHS Regulations

Printing date 14.11.2022

Revision: 14.11.2022

1 Identification

Product Name: SILVER BRAZING FLUX**Other Means of Identification:** Mixture**Other Name:** Silver Brazing Paste Flux, AWS A5.31**Part Number:** 228478**Recommended Use of the Chemical and Restriction on Use:** Welding consumables and related products.**Details of Manufacturer or Importer:**

Adventure Trading Australia Pty Ltd

71 Charles Ulm Place

Eagle Farm QLD 4009

Phone Number: (07) 3193 1110**Emergency telephone number:** National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Skull and crossbones

Acute Toxicity (Oral) 3 H301 Toxic if swallowed.



Health hazard

Toxic To Reproduction 1B H360FD May damage fertility. May damage the unborn child.



Skin Corrosion/Irritation 2	H315	Causes skin irritation.
Eye Irritation 2A	H319	Causes serious eye irritation.
STOT SE 3	H335	May cause respiratory irritation.

Signal Word Danger**Hazard Statements**

H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H335	May cause respiratory irritation.

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

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P321	Specific treatment (see on this label).
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 10043-35-3	Boric acid ☠ Toxic To Reproduction 1B, H360FD	30-45%
CAS: 12228-71-6	Potassium fluorhydroborate ☠ Acute Toxicity (Oral) 3, H301; ☠ Skin Corrosion/Irritation 2, H315; Eye Irritation 2A, H319; STOT SE 3, H335	20-40%
CAS: 1332-77-0	Boric acid (H ₂ B ₄ O ₇), dipotassium salt ☠ Toxic To Reproduction 1B, H360FD	15-25%
CAS: 14075-53-7	Potassium tetrafluoroborate ☠ Acute Toxicity (Oral) 3, H301; ☠ Skin Corrosion/Irritation 2, H315; Eye Irritation 2A, H319	7-15%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation develops and persists.

Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation. Some gases released during welding may cause pulmonary oedema, asphyxiation or death. Excessive inhalation of fumes may cause 'metal fume fever'. Symptoms include chills, fever, aches, sweating, vomiting and other flu-like symptoms.

Skin Contact: Causes skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Toxic if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea, vomiting, headache, dizziness, difficulty breathing and chest pain.

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5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include various toxic and irritating fumes specific for welding operations. Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: 2X

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours or mists. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and scoop up spill material or wipe up with clean rag or paper towel. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours or mists.

Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition.

8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 14075-53-7 Potassium tetrafluoroborate

WES	TWA: 2.5 mg/m ³ as F
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CAS: 12228-71-6 Potassium fluorohydroborate

WES	TWA: 2.5 mg/m ³ as F
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Engineering Controls:

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

Respiratory Protection:

Use an approved particulate respirator (filter type P) under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715

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and 1716 for more information.

Skin Protection:

Welding gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection: Helmet or face shield with appropriate filter (suitable for welding).

9 Physical and Chemical Properties

Appearance:**Form:** Paste**Colour:** White**Odour:** Odourless**Odour Threshold:** No information available**pH-Value:** No information available**Melting point/freezing point:** 500 °C**Initial Boiling Point/Boiling Range:** No information available**Flash Point:** No information available**Flammability:** No information available**Auto-ignition Temperature:** No information available**Decomposition Temperature:** No information available**Explosion Limits:****Lower:** No information available**Upper:** No information available**Vapour Pressure:** No information available**Relative Density:** No information available**Vapour Density:** No information available**Evaporation Rate:** No information available**Solubility in Water:** No information available**Partition Coefficient (n-octanol/water):** No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.**Chemical Stability:** Stable at ambient temperature and under normal conditions of storage and use.**Conditions to Avoid:** None known.**Incompatible Materials:** None known.**Hazardous Decomposition Products:**

Various toxic and irritating fumes specific for welding operations.

The composition of welding fumes will depend on the circumstances of use, but can be expected to include oxides of carbon, nitrogen, boron, iron, manganese, silicon, chromium and copper. Ozone may be generated in some circumstances. Some products may also contain antimony, barium, molybdenum, niobium, strontium, tungsten or zirconium.

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11 Toxicological Information

Toxicity:**LD50/LC50 Values:****CAS: 10043-35-3 Boric acid**

Oral LD50 >2,660 mg/kg (rat)

Acute Health Effects**Inhalation:**

May cause respiratory irritation. Some gases released during welding may cause pulmonary oedema, asphyxiation or death. Excessive inhalation of fumes may cause 'metal fume fever'. Symptoms include chills, fever, aches, sweating, vomiting and other flu-like symptoms.

Skin: Causes skin irritation.**Eye:** Causes serious eye irritation.**Ingestion:**

Toxic if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea, vomiting, headache, dizziness, difficulty breathing and chest pain.

Skin Corrosion / Irritation: Causes skin irritation.**Serious Eye Damage / Irritation:** Causes serious eye irritation.**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:** Based on classification principles, the classification criteria are not met.**Reproductive Toxicity:** May damage fertility. May damage the unborn child.**Specific Target Organ Toxicity (STOT) - Single Exposure:** May cause respiratory irritation.**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No information available**Existing Conditions Aggravated by Exposure:** No information available

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

CAS: 10043-35-3 Boric acid

EC50/48 h 133 mg/l (daphnia magna)

LC50/96 h 279 mg/l (fish)

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** Bioaccumulation is not expected to occur.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

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Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number	
ADG, IMDG, IATA	UN3288
Proper Shipping Name	
ADG, IMDG, IATA	TOXIC SOLID, INORGANIC, N.O.S. (Potassium fluorohydroborate, Potassium tetrafluoroborate)
Dangerous Goods Class	
ADG Class:	6.1
Packing Group:	
ADG, IMDG, IATA	III
Marine pollutant:	No
EMS Number:	F-A,S-A
Hazchem Code:	2X
Special Provisions:	223, 274
Excepted quantities (EQ):	E1
Limited Quantities:	5 kg
Packagings & IBCs - Packing Instruction:	P002, IBC08, LP02
Packagings & IBCs - Special Packing Provisions:	B3
Portable Tanks & Bulk Containers - Instructions:	T1
Portable Tanks & Bulk Containers - Special Provisions:	TP33

15 Regulatory Information**Australian Inventory of Industrial Chemicals:**

All components are listed except:

CAS: 12228-71-6 Potassium fluorohydroborate

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 5

16 Other Information**Date of Preparation or Last Revision:** 14.11.2022**Prepared by:** MSDS.COM.AU Pty Ltd

www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

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Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Toxic To Reproduction 1B: Reproductive toxicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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