



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product identifier

Product name: GRIFFITH PASTE FLUX

Other means of identification

Product code: 54.445, 54.447

Recommended use of the chemical and restrictions on use

Recommended use: General purpose silver braze flux (fluoride free)

Details of the supplier of the safety data sheet

Manufacturer: Grobet File Company of America, LLC
750 Washington Avenue, Carlstadt, NJ 07072

Business Phone: 201-939-6700; Toll Free - 800-847-4188 (USA Only)

Emergency Telephone number

For hazardous materials incidents only, call ChemTel Emergency Response Number: 800-255-3924.

Date: February 16, 2023

Supersede Date: March 3, 2021

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Causes skin irritation (Category 2), H315

Serious eye irritation (Category 2A), H319

Acute toxicity, oral (Category 4), H302

Hazard statement(s)

H302: Harmful if swallowed

H315: Causes skin irritation

H319: Causes serious eye irritation

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2.2 GHS Label elements, including precautionary statements

Emergency overview

Appearance:	White to slight gray
Physical state:	Paste
Odor:	None
Signal Word:	Warning



Precautionary statement(s)

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310+P330+P331: IF SWALLOWED: Immediately call a POISON CENTER or physician, rinse mouth and DO NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340+P311+P310: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Contact a physician if you feel unwell.
P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Contact a physician
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None



SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>EINECS No.</u>	<u>Weight %</u>
Potassium Fluoroborate	14075-53-7	237-928-2	25-50
Potassium Tetraborate	1332-77-0	215-575-5	25-50
Water	7732-18-5	231-791-2	10-30

Others, if any, are non-hazardous and are claimed as trade secret.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician immediately. Continue rinsing eyes during transport to hospital.

Skin: Wash off with plenty of water. Consult a doctor if a rash or burn develops.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center. Give large quantities of water or milk.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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5.2 Special hazards arising from the substance or mixture

May release potassium oxides or borate compounds. Dense smoke may be generated.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Full protective equipment required.

5.4 Further information

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Soak up material with inert absorbent material. Squeegee, scrape or shovel material into a suitable container. Clean spill area thoroughly.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

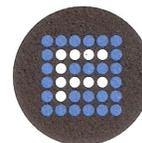
Avoid contact with skin and eyes. Avoid formation of vapor or mist. Provide appropriate exhaust ventilation. Professionally wash contaminated clothes before re-use. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store flux at ambient conditions, keep containers tightly closed and away from foodstuffs. Wash thoroughly after handling to remove all residues. No eating or smoking in work area.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Components	OSHA PEL	OSHA TWA	ACGIH TLV	ACGIH TWA
Potassium Tetraborate	NA	NA	NA	NA
Potassium Fluoroborate	NA	NA	NA	NA

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	white to slight gray paste
odor:	none
ph:	8
boiling point:	~ 100 c
solubility in water:	moderate
specific gravity (h ₂ o = 1):	1.79
evaporation rate:	na
% volatile:	na

9.2 Other safety information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Acids, alkalis

10.6 Hazardous decomposition products

Potassium oxides and borate compounds.



SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Component toxicity

Components	LC50/Inhalation/6h/Rat	LD50/Dermal	LD50/Oral/Rat
Potassium Tetraborate	NA	NA	NA
Potassium Fluoroborate	NA	NA	NA

11.2 Effects of Acute Overexposure:

- a. Inhalation: No data available.
- b. Eyes: Rabbit – Result: Eye irritation
- c. Skin Contact: no data available
- d. Ingestion: No data available.

11.3 Primary Route of Exposure:

Skin, eyes, and inhalation

11.4 Effects of Chronic Exposure:

Coughing, erythema, nausea.

11.5 Target Organs:

Skin, nasal, respiratory irritant and kidney

11.6 Reproductive Effects

No data available

11.7 Carcinogenicity:

No data available

SECTION 12: ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

Components	LC50 – <i>Ptychocheilus lucius</i>	LC50 – <i>Lepomis macrochirus</i> (Bluegill)
Potassium Tetraborate	NA	NA
Potassium Fluoroborate	NA	NA

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Toxicity to daphnia and other aquatic invertebrates.

Components	LC50 – Daphnia magna (Water flea)	EC50 – Daphnia magna (Water flea)
Potassium Tetraborate	NA	NA
Potassium Fluoroborate	NA	NA

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of in accordance with all federal, state, and local regulations.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US): Not Regulated

IMDG: Not Regulated

IATA: Not Regulated

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SECTION 15: REGULATORY INFORMATION

International Inventories

USA (TSCA): Complies

Federal Regulations

SARA Title III 313 Reportable Substances

This product does not contain chemicals which are subject to the reporting requirements of the Act and of Title 40 of the Code of Federal Regulations, Part 372

SARA Title III Section 311/312 Hazard Categories:

Acute Health Hazard
Chronic Health Hazard

Toxic Substance Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification Section 12 (b) of TSCA:
None

State Regulations (RTK)

Pennsylvania Right to Know Components

None

New Jersey Right to Know Components

None

WHIMS 2015 HAZARD CLASS:



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California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

HMIS:

Health: 2

Flammability: 0

Reactivity: 0

PREPARATION INFORMATION:

DISCLAIMER: The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Grobet File Company of America makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereon. Grobet File Company of America warrants only that its products conform to their published specifications and no other express warranty is made with regards thereof. We do not guarantee favorable results, and we assume no liability in connection with the use of the products. They are intended for use by persons having technical skill and knowledge, at their own discretion and risk.