

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME: Powder Brazing Flux

FORNEY SKUs: **37250**

MANUFACTURER: Forney Industries, Inc.
2057 Vermont Dr.
Fort Collins, CO 80525
Phone: 800-851-6038
Fax: 970-498-9505
E-mail: customerservice@forneyind.com

EMERGENCY RESPONSE PHONE: 1-800-535-5053

INTERNATIONAL EMERGENCY RESPONSE PHONE: 352-323-3500

2. HAZARD IDENTIFICATION:

Emergency Overview: Sodium Tetraborate Pentahydrate is a white odourless, powdered substance that is not flammable, combustible, or explosive, and it presents no unusual hazard if involved in a fire. Sodium Tetraborate Pentahydrate presents little or no hazard to humans and has low acute oral and dermal toxicities. Care should be taken to minimize the amount of Sodium Tetraborate Pentahydrate released to the environment to avoid ecological effects.

Classification of the Substance/Mixture:

Toxic to Reproduction, Category 1B

Labeling:



Symbols:

Signal Word: Danger

Hazard Statements:

H360 – May damage fertility or the unborn child.

Precautionary Statements:

P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.

P281 – Use personal protective equipment as required.

P308+P313 – IF exposed or concerned: Get medical advice/attention.

P405 – Store locked up.

Classification of the Substance/Mixture:

Toxic to Reproduction, Category 2

Eye Damage / Irritation, Category 2A

Acute Toxicity: Oral, Category 5

Labeling:



Symbols:

Signal Word: Warning

Hazard Statements:

H361 – Suspected of damaging fertility or the unborn child.

H319 – Causes serious eye irritation.

H303 – May be harmful if swallowed.

Precautionary Statements:

P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.

P281 – Use personal protective equipment as required.

P308+P313 – IF exposed or concerned: Get medical advice/attention.

P405 – Store locked up.

P264 – Wash thoroughly after handling.

P280 – Wear eye protection/face protection.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 – If eye irritation persists: Get medical advice/attention.

P312 – Call a POISON CENTER/doctor/physician if you feel unwell.

Classification of the Substance/Mixture:

Aquatic Hazard (Long-Term), Category 3

Labelling:

Symbols: No pictogram

Signal Word: No signal word

Hazard Statements:

H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P273 – Avoid release to the environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

Chemical Identity	CAS #	Range %	OSHA PEL (mg/m3)	ACGIH-TLV (mg/m3)	Carcinogenicity	R-Phrase
Boric Acid	10043-35-3	75-85	10	NR	No	R60/61
Borax 5 Mol	12179-04-3	15-25	10	10	No	

Important This section covers the materials of which the products manufactured. The fumes and gases produced during normal use of this product are covered in section 10. The term "Hazardous" in "Hazardous Material" should be interpreted as a term required and defined in OSHA Hazard Communication Standard 29CFR 1910-1200 and it does not necessarily imply the existence of hazard. The chemicals or compounds reportable by Section 313 of SARA are marked by the symbol #.

4. FIRST AID MEASURES:

Inhalation: Remove to fresh air immediately or administer oxygen. Get medical attention immediately.

Skin: Flush skin with large amounts of water and soap. If irritation develops and persists, get medical attention.

Eye: Flush eyes with water for at least 15 minutes. Get medical attention.

Ingestion: Obtain medical attention immediately if ingested. Rinse mouth.

5. FIRE-FIGHTING MEASURES:

Suitable Extinguishing Media: Not applicable. Non-combustible; inherent fire retardant.

Unsuitable Extinguishing Media: Not applicable

Specific Hazards Arising From Chemical: 29 CFR 1910.120 (Non Flammable Solid). Boric oxide fumes.

Protective Equipment: Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions: Refer to section 8.

Environment Precautions: Refer to section 13.

Cleaning Measures: As an inert solid waste in accordance with state, local, and federal regulations.

California: Sodium Tetraborate Pentahydrate is a "hazardous waste" in California and should be handled in accordance with state regulations.

EPA Hazardous Waste Number: None

RCRA (40 CFR 261): Sodium Tetraborate Pentahydrate is not listed under any sections of the Federal Resource Conservation and Recovery Act.

Water Spill: Sodium Tetraborate Pentahydrate will cause localized contamination of surrounding waters based on the quantity dissolved in these waters. At high concentrations, some damage to local vegetation, fish, and other aquatic life may be expected. Advise the local water authority that none of the affected water should be used for irrigation or for potable water until natural dilution returns boron level to normal.

7. HANDLING AND STORAGE:

Precautions for Safe Handling: Keep container tightly sealed. Store in cool, dry location in tightly closed containers. Ensure good ventilation at the workplace. Open and handle the container with care.

Conditions for Safe Storage: Store away from oxidizing agents. Keep container tightly sealed. Store at room temperature. Store in cool dry conditions in well sealed containers.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

Engineering Controls: The usual precautionary measures for handling chemicals should be followed. Keep away from food, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before break and at the end of the work. Store all protective clothing separately. Maintain an ergonomically appropriate working environment.

Exposure limits: Use industrial hygiene equipment to ensure that exposure does not exceed applicable national exposure limits. The limits defined under section 3 can be used as guidance. Unless noted, all values are for 8 hour time weighted average.

Biological limits: No available data

Personal protection:

Respiratory protection: Use an air purifying dust respirator when high concentrations are present.

Hands protection: Wear appropriate gloves to prevent skin contact.

Eyes protection: Safety glasses.

Skin protection: Wear safety boots, rubber apron, arm and shoulder protection. Keep protective clothing clean and dry.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: White powder.

Odour: Odourless

Melting Point/Melting Range: 750° F, 400° C

Solubility: Moderate (hot water).

Other Information: No available data.

10. STABILITY AND REACTIVITY:

Chemical Stability: This product is stable under normal conditions. This product loses H₂O when heated.

Hazardous Reactions: Contact with chemical substances like acids or strong bases cause generation of gas.

Conditions to Avoid: Not applicable.

Incompatible Materials: Oxidizing agents. Reaction with strong reducing agents such as metal hydrides, acetic anhydride or alkali metals will generate hydrogen gas which could create an explosive hazard.

Hazardous Decomposition Products: Boric oxide fumes.

11. TOXICOLOGICAL INFORMATION:

Acute Effects: Oral: LD-50 (Rat): 6,000 mg/kg of body weight. **Inhalation:** LC-50 (Rat): > 2.0 mg/l (or g/m³). **Dermal:** LD-50 (Rabbit): >2,000 mg/kg of body weight. **Skin Irritation:** Non-irritant.

Chronic Effects: To the best of our knowledge, the chronic toxicity of this product is not fully known. EPA-I: Inadequate data for an assessment of human carcinogenic potential. May cause harm to the unborn child. ACGIH A4: Not classifiable as a human carcinogen. May impair fertility.

The registry of toxic effects of chemical substances (RTECS) contains acute and/or other multiple dose toxicity data for components in this product.

The registry of toxic effects of chemical substances (RTECS) contains reproductive and/or mutation data for components in this product.

12. ECOLOGICAL INFORMATION:

Toxicity: No available data.

Persistence and Degradability: No available data.

Bio accumulative Potential: No available data.

Mobility in Soil: No available data.

Other Adverse Effects: No available data.

Do not allow undiluted product or large quantities to reach ground water, water course or sewage systems. Do not allow product to be released in the environment without proper governmental permits.

13. DISPOSAL CONSIDERATIONS:

Product: For product elimination, dispose of in accordance with EPA regulations.

Package: May be disposed in approved landfills provided local regulations are observed.

14. TRANSPORT INFORMATION:

UN-number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class: Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for users: Store in dry location.

15. REGULATORY INFORMATION:

TSCA No.: Sodium Tetraborate Pentahydrate appears on the EPA TSCA inventory list under the CAS no. 1330-43-4, which represents the anhydrous form of this inorganic salt.

RCRA: Sodium Tetraborate Pentahydrate is not listed as a hazardous waste under any sections of the Resource Conservation and Recovery Act or regulations (40 CFR 261 et seq.).

Superfund: CERCLA/SARA. Sodium Tetraborate Pentahydrate is not listed under CERCLA (the Comprehensive Environmental Response Compensation and Liability Act) or its 1986 amendments, SARA, (the Superfund Amendments and Reauthorization Act), including substances listed under Section 313 of SARA, Toxic Chemicals, 42 USC 11023, 40 CFR 372.65; Section 302 of SARA, Extremely Hazardous Substances, 42 USC 11002, 40 CFR 355; or the CERCLA Hazardous Substances list, 42 USC 9604, 40 CFR 302.

Safe Drinking Water Act: Sodium Tetraborate Pentahydrate is not regulated under the SDWA, 42 USC 300g-1, 40 CFR 141 et seq. Consult state and local regulations for possible water quality advisories regarding Boron.

Clean Water Act (Federal Water Pollution Control Act): 33 USC 1251 et seq.

(a) Sodium Tetraborate Pentahydrate is not itself a discharge covered by any water quality criteria of Section 304 of the CWA, 33 USC 1314.

(b) It is not on the Section 307 List of Priority Pollutants, 33 USC 1317, 40 CFR 129.

(c) It is not on the Section 311 List of Hazardous Substances, 33 USC 1321, 40 CFR 116.

OSHA/Cal OSHA: This SDS document meets the requirements of both OSHA (29 CFR 1910.1200) and Cal OSHA (Title 8 CCR 5194(g)) hazard communication standards. Refer to Section 6 for regulatory exposure limits.

IARC: The International Agency for Research on Cancer (of the World Health Organization) does not list or categorize Sodium Tetraborate Pentahydrate as a carcinogen.

NTP Annual Report on Carcinogens: Sodium Tetraborate Pentahydrate is not listed.

OSHA Carcinogen: Sodium Tetraborate Pentahydrate is not listed.

California Proposition 65: Sodium Tetraborate Pentahydrate is not listed on any Proposition 65 lists of carcinogens or reproductive toxicants.

CONEG Model Legislation: Sodium Tetraborate Pentahydrate meets all the CONEG requirements relating to heavy metal limitations on components of packaging materials.

Clean Air Act: Sodium Tetraborate Pentahydrate was not manufactured with and does not contain any Class I or Class II ozone depleting substances, as defined by EPA.

Federal Food, Drug and Cosmetic Act: Pursuant to 21 CFR 175.105, 176.180 and 181.30, Sodium Tetraborate Pentahydrate is approved by the FDA for use in adhesive components of packaging materials, as a component of paper coatings on such materials, or for use in the manufacture, thereof, which materials are expected to come in contact with dry food products.

Chemical Inventory Listing

US EPA TSCA 1330-43-4

Canadian DSL 1330-43-4

EINECS 215-540-4

South Korea 1-760

Japanese MITI (1)-69

Federal Food, Drug, and Cosmetic ACT:

Pursuant to 21 CFR 175.105, 176.108 and 181.30, Sodium Tetraborate

Pentahydrate is approved by the FDA for use in adhesive components

of packaging materials, as a component of paper coatings on such materials

or for use in the manufacture, thereof, which materials are expected to come in contact with dry food products

16. OTHER INFORMATION:

The information in this document is believed to be correct as of the date issued. However, no warranty is expressed to be implied regarding the accuracy or completeness of this information. This information and product are furnished on the condition that the person receiving them shall make his own determinations as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

This Safety Data Sheet complies with the EC directives 91/155/EEC and 93/112/EEC, including modifications 2001/58/EC.

Complies with OSHA Communication Standard 29 CFR 1910.1200 and Superfund Amendments and Reauthorization Act (SARA) of 1986 Public Law 99-499

R-Phrases:

R60/61 – May impair fertility. May cause harm to the unborn child.

S-Phrases:

S2 – Keep out of reach of children.

END OF SDS SHEET.