Safety Data Sheet

1. Supplier and Manufacturer
   Aufhauser Corporation
   39 West Mall
   Plainview NY 11803 USA
   Telephone: 516-694-8696  www.brazing.com
   Emergency Phone Number: 516-694-8696 or 212-246-0205
   24-hour Emergency Response: 212-246-9420 or 911
   SDS Number: Flux Bronze 201802
   Product Codes: Bronze Flux
   Product Use(s): Flux for metal brazing

2. Hazards identification
   Classification(s)
   GHS Classified: Repr. 1B: H360
   GHS Label Symbol(s): Health Hazard
   GHS Label Signal Word(s): Danger
   GHS Label Hazard Statement(s): May damage fertility or the unborn child
   GHS Label Precautionary Statement(s): Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wear protective gloves, protective clothing, and eye/face protection. Wash hands thoroughly after handling. Store locked up. Do not eat, drink, or smoke when using this product. If exposed or concerned, get medical advice or attention. Store locked up. Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>% ww</th>
<th>GHS note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boric acid</td>
<td>10043-35-3</td>
<td>70 - 90</td>
<td>Repr 1B: H360</td>
</tr>
<tr>
<td>Borax</td>
<td>1303-96-4</td>
<td>&lt; 30</td>
<td></td>
</tr>
</tbody>
</table>

Unlisted percentages are non-hazardous stabilizers and/or water.

4. First aid measures
   **Eyes:** Flush affected areas with water for at least fifteen minutes. Remove contact lenses if present and easy to do. Seek medical attention/ contact poison control center immediately.
   **Skin:** Remove contaminated clothing. Wash affected area with large quantities of water. Chemical burns must be treated by a physician. Seek medical attention. Launder or dry-clean clothing before reuse.
   **Ingestion:** Seek immediate medical assistance. Rinse mouth. Do not induce vomiting unless explicitly instructed by medical personnel. Do not give anything by mouth to an unconscious or convulsive person.
   **Inhalation:** If signs and symptoms of toxicity are observed, remove subject from area to fresh air, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.
5. Firefighting measures


**Unsuitable extinguishing media**: Do not use water jet as an extinguisher; water jetting will spread fire. No water on molten metal.

**Special PPE and equipment for firefighters**: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**: Use water spray to cool unopened containers. Remove containers from fire area if possible.

**Specific methods**: Use standard firefighting procedures and consider other hazardous materials involved.

**General fire hazards**: No unusual fire or explosion hazards noted.

6. Accidental release measures

**Personal Precautions**: Keep unnecessary personnel away. Avoid inhalation of dust from spilled material. Avoid contact with skin, eyes, and mucous membranes. Wear appropriate protective equipment (e.g., gloves, chemical goggles) during cleanup. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Methods and Materials**: Isolate spilled product and transfer to impervious containers. Avoid generation of dust during clean-up. Sweep large spills or wipe-up small spills. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Do not reuse reclaimed spilled material.

**Environmental Precautions**: Prevent spills from entering sewers or contaminating soil.

7. Handling and storage

**Handling Precautions**: Do not get this material in direct contact with eyes or skin. Avoid prolonged exposure and inhalation. Provide adequate ventilation. Use protective equipment as needed.

**Work and Hygiene Practices**: To prevent ingestion following use of the product, wash hands and face before eating, drinking, applying cosmetics, or using tobacco. Remove contaminated clothing or protective equipment before entering eating/drinking areas.

**Storage Precautions**: Store in a cool, locked location away from incompatible materials (see Section #10).

8. Exposure controls/personal protection.

**Ingredients – Exposure Limits**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>ACGIH TLV (mg/m3)</th>
<th>OSHA PEL (mg/m3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boric acid</td>
<td>10043-35-3</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Borax (Sodium tetraborate decahydrate)</td>
<td>1303-96-4</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

**Engineering Controls**: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Eye/Face Protection**: Wear eye protection adequate to prevent eye contact with the product and injury from the hazards of product use.

**Skin Protection**: Wear protective gloves and clothing to prevent skin contact and injuries from the hazards of product use and/or for prolonged contact with the product. Avoid flammable fabrics.

**Respiratory Protection**: If an exposure level to a component(s) exceeds an applicable standard, use a NIOSH-approved respirator having a configuration (face piece, filter media, assigned protection factor, etc.) effective for the concentration of the component(s) generated. For guidance on selection and use of respirators, consult American National Standard Z88.2 (ANSI, New York, NY 10036, USA).

**General hygiene**: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and PPE to remove contaminants.

9. Physical and chemical properties

**Appearance**: powder solid - white

**Odor**: none

**Odor threshold**: n/a

**pH**: n/a

**Melting point**: approx. 400 C (750 F)

**Freezing point**: n/a

**Boiling point**: n/a

**Flash Point**: n/a

**Evaporation Rate (nBuAc = 1)**: n/a

**Flammability Class**: n/a

**Lower Explosive Limit**: n/a

**Upper Explosive Limit**: n/a

**Vapor pressure**: n/a

**Vapor density**: n/a

**Relative density (H2O)**: n/a

**Solubility (H2O): moderate (hot water)**

**Oil-water partition coefficient**: not determined

**Auto ignition Point**: n/a

**Decomposition temperature**: not determined

**Viscosity**: not determined

**Specific gravity @ 20C (water = 1)**: n/a

**Bulk density**: n/a
10. Stability and reactivity

Reactivity: Non-reactive under normal conditions of use, cool storage and transport.
Stability: stable
Hazardous Polymerization: will not occur
Conditions to avoid: Direct sunlight/ excessive heat. Contact with incompatible materials.
Incompatible Materials: Strong bases.
Potential Hazardous Decomposition Products: Boric oxide fumes.

11. Toxicological information

<table>
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<th>Ingredients - Toxicological Data</th>
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<tbody>
<tr>
<td>Boric acid</td>
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<tr>
<td></td>
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<tr>
<td>Borax</td>
</tr>
</tbody>
</table>

Primary Routes(s) of Entry: Ingestion; inhalation.
Eye Hazards: May cause irritation.
Skin Hazards: May cause irritation.
Ingestion Hazards: May cause cyanosis.
Inhalation Hazards: May cause irritation to the respiratory system.
Symptoms Related to Overexposure: Nausea, vomiting, diarrhea. May cause cyanosis.
Chronic Effects: Cracking of the skin.
Carcinogenicity: The product contains no chemicals classified as potential or demonstrated carcinogens by IARC, NTP, or OSHA.
Mutagenicity: Not reported to produce mutagenic effects in humans.
Embryotoxicity: Not reported to cause embryotoxic effects in humans.
Teratogenicity: Not reported to cause teratogenic effects in humans.
Reproductive Effects: May damage fertility or the unborn child.

12. Ecological information

Ecological data for the components is as follows:

| Boric acid | LC50 (fish): 5600 mg/L (Gambusia affinis) |
|           | EC50 (other aquatic organisms): 115 mg/L (Daphnia magna) |
|           | EC50 (other aquatic organisms): 658-875 mg/L (Daphnia magna) |

Ecotoxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Other adverse effects: No further information available.

13. Disposal considerations

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Do not discharge waste product into sanitary or storm sewers or allow it to contaminate soil. Consult applicable Federal, State/ Provincial, and local regulations.

14. Transport information

DOT, IATA, IMDG, TDG: Not regulated as dangerous goods.

15. Regulatory information

United States Regulatory Information
All components of this product are listed on the EPA’s TSCA inventory.
SARA Hazard Classes: n/a

Components are listed under various State regulations.
Proposition 65 (California):
· Chemicals known to cause cancer: none
· Chemicals known to cause reproductive toxicity for females: none
· Chemicals known to cause reproductive toxicity for males: none
· Chemicals known to cause developmental toxicity: none

Canadian Regulatory Information
All components of this product are listed on either the Domestic Substances List (DSL) or the Nondomestic Substances List (NDSL).
WHMIS Class(es) and Division(s): D2A

16. Other information including information on preparation and revision of the SDS

<table>
<thead>
<tr>
<th>NFPA Ratings for Product</th>
<th>HMIS Ratings for Product (Legend)</th>
</tr>
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<tbody>
<tr>
<td>Health - 2 (intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given)</td>
<td>Health - 2 (moderate hazard - temporary or minor injury may occur)</td>
</tr>
<tr>
<td>Flammability - 0</td>
<td>Flammability – 0 (minimal hazard)</td>
</tr>
<tr>
<td>Reactivity - 1 (Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but no violently.)</td>
<td>Physical Hazard – 1 (slight hazard)</td>
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Date of Preparation: 2018-Feb

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Aufhauser Corporation