MATERIAL SAFETY DATA SHEET DIRECTIVE 91/155/EEC

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

1.1 Chemical Nature, Sales Name, Use: White Flux used in soldering brass posts to archwires.

1.2 Company Identification:
G&H Wire Company
P.O. Box 248
Greenwood, Indiana 46142
Telephone: 317-346-6655
Facsimile: 317-346-6663

1.3 Emergency Contact: 317-346-6655

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS#</th>
<th>% WT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Tetraborate</td>
<td>1332-77-0</td>
<td>30-40</td>
</tr>
<tr>
<td>Boric Acid</td>
<td>10043-35-3</td>
<td>20-30</td>
</tr>
<tr>
<td>Potassium Pentaborate</td>
<td>11128-29-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Potassium Bifluoride</td>
<td>7789-29-9</td>
<td>20-30</td>
</tr>
<tr>
<td>Sodium Dodecyl Sulfate</td>
<td>151-21-3</td>
<td>0-0.5</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>10-20</td>
</tr>
</tbody>
</table>

NOTE: The percentage by weight values reported for the ingredients in this product represent approximate formulation values.

3. HAZARDS IDENTIFICATION

Inhalation: Inhalation of the components and decomposition byproducts of this product does not pose a significant risk to health when the product is used in accordance with instructions and appropriate protective measures. The components/decomposition products may cause one or more of the following symptoms and effects if exposure is excessively high and/or prolonged.

Acute exposure: Irritation to the nose, throat, and respiratory tract; cough, nose bleeds, nausea, vomiting, chest tightness, chills, fever, tearing, pneumonitis, and pulmonary edema.

Chronic exposure: Abdominal pain and cramps, liver and kidney damage, impaired pulmonary function, and fluorosis (a bone disease characterized by mottled teeth, osteosclerosis, and pain and loss of mobility in the joints).

4. FIRST-AID MEASURES

4.1 Inhalation: Remove to fresh air. If breathing is difficult contact a physician.
Flux used on Posted Archwires

4.2 Skin Contact: Immediately flush with cold water for at least 15 minutes while removing contaminated clothing and shoes, paying particular attention to skin under the nails. If irritation develops contact a physician.

4.3 Eye Contact: Immediately flush with plenty of water for at least 30 minutes and proceed to get medical attention.

4.4 Ingestion: If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water and seek medical care.

5. FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media: Water spray, Alcohol Foam or Carbon Dioxide

5.2 Unsuitable Extinguishing Media:

5.3 Particular Hazards: Material is non-flammable and non-explosive.

5.4 Protective Equipment for Fire Fighters: Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions: Avoid contact with skin, eyes, and mucous membranes. Dilute and wash down spillage with water. Wear appropriate protective equipment (e.g., gloves, boots, impervious goggles) during cleanup and disposal.

6.2 Environmental Precautions: Dispose of in accordance with state, local, and federal regulations

6.3 Cleaning Methods: Dispose of in accordance with state, local, and federal regulations

7. HANDLING AND STORAGE

7.1 Handling: Avoid contact with skin, eyes, and mucous membranes. Dilute and wash down spillage with water. Wear appropriate protective equipment (e.g., gloves, boots, impervious goggles) during cleanup and disposal.

7.2 Storage: Store in a cool, dry place away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local exhaust ventilation may be necessary for some operations.
Eye/Face Protection: Use safety glasses.
Skin Protection: Wear protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Form: Paste
Color: White
Odor: Odorless

9.2 Change of State:
Melting Point/Range: 422.4 Celsius
Boiling Point: N/A

9.3 Flash Point

9.4 Ignition Point:

9.5 Vapor Pressure (20°C): N/A

9.6 Density (20°C): N/A

9.7 Solubility in: Water (20°C): 100% Soluble
Organic Solvent (20°C):
Flux used on Posted Archwires

9.8 PH-Value (at 10g/1H2O): 8.8 to 9.1
9.10 Viscosity (20°C): N/A

10. STABILITY AND REACTIVITY

10.1 Thermal Decomposition: Yes
10.2 Conditions to Avoid: Stable at room temperature. Avoid temperatures at or above 225 C.
10.3 Materials to Avoid: Acetic anhydride; alkali and alkali earth metals; zirconium.
10.4 Hazardous Decomposition Products: boron and potassium when heated.

11. TOXICOLOGICAL INFORMATION

11.1 Oral Toxicity: Not defined
11.2 Inhalation: Not defined
11.3 Skin Irritation: Not defined
11.4 Sensitization: Not defined
11.5 Eye Irritation: Not defined
11.6 Further Details:

12. ECOLOGICAL INFORMATION

12.1 Acute Toxicity in Fish (LC-50/48h) No date available
12.2 Bacteria Toxicity (EC-0): No date available
12.3 Biodegradability: No appreciable biodegradation is expected.
12.4 Further Details: None

13. DISPOSAL CONSIDERATIONS

13.1 Product: Do not dispose of into sewer, body of water, or on the ground. Dispose of in accordance with state, local, and federal regulations
13.2 Packaging: In accordance with state, local, and federal regulations
13.3 Waste Disposal Code: In accordance with state, local, and federal regulations

14. TRANSPORT INFORMATION

14.1 Overland Transport ADR/RID/GGVS/GGVE:
14.2 Sea Transport GGVSEA/IMDG-Code:
14.3 Air Transport ICAO/IATA-DGR:
14.4 Inland Waterway Transport ADNR:
14.5 Further Details:

15. REGULATORY INFORMATION

Preparation as defined by the (German) Chemicals Act (dated 4/03/1990).
15.1 Labeling:
Product Contains:
Danger Symbol:
R-Sentences R36/37/38:
S-Sentences S26:
S-Sentences S28:
15.2 National Regulation:
VbF:
TA-Air:
Water Pollution 1:

16. OTHER INFORMATION

16.1 The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.

16.2 Revision Date: November 28, 2006