**SECTION 1: Identification**

1.1. **Identification**

- **Product form**: Mixture
- **Trade name**: X1166A Dry Boron Modified
- **Product code**: 82-117

1.2. **Recommended use and restrictions on use**

No additional information available

1.3. **Supplier**

Lucas-Milhaupt, Inc.
5656 South Pennsylvania Ave.
Cudahy, WI 53110 - USA
T (414)-769-6000
LM_SDSinfo@lucasmilhaupt.com - www.Lucasmilhaupt.com

1.4. **Emergency telephone number**

- **Emergency number**: CHEMTREC within the USA and Canada: 1-800-424-9300
  CHEMTREC outside the USA and Canada +1 701-741-5970

**SECTION 2: Hazard(s) identification**

2.1. **Classification of the substance or mixture**

- **GHS US classification**
  - Acute toxicity (oral), Category 4: H302, Harmful if swallowed.
  - Reproductive toxicity, Category 2: H361, Suspected of damaging fertility or the unborn child.

Full text of H statements: see section 16

2.2. **GHS Label elements, including precautionary statements**

- **GHS US labelling**
  - **Hazard pictograms (GHS US)**: ![Warning] ![Fertility]
  - **Signal word (GHS US)**: Warning
  - **Hazard statements (GHS US)**: H302 - Harmful if swallowed.
    H361 - Suspected of damaging fertility or the unborn child.
  - **Precautionary statements (GHS US)**: P201 - Obtain special instructions before use.
    P202 - Do not handle until all safety precautions have been read and understood.
    P264 - Wash hands, forearms and face 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+P312 - If swallowed: Call a poison center/doctor if you feel unwell
    P308+P313 - If exposed or concerned: Get medical advice/attention.
    P330 - Rinse mouth.
    P405 - Store locked up.
    P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. **Other hazards which do not result in classification**

No additional information available

2.4. **Unknown acute toxicity (GHS US)**

Not applicable

**SECTION 3: Composition/information on ingredients**

3.1. **Substances**

Not applicable

3.2. **Mixtures**

Not applicable
**SECTION 4: First-aid measures**

### 4.1. Description of first aid measures

First-aid measures general: Call a physician immediately.

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact: Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion: Rinse mouth. Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact: Burns.

Symptoms/effects after eye contact: Serious damage to eyes.

Symptoms/effects after ingestion: Burns.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

**SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:**
- Dry powder.
- Water spray.
- Foam.

**Unsuitable extinguishing media:**
- Water.

### 5.2. Specific hazards arising from the chemical

**Fire hazard:** Flammable solid. Self-heating: may catch fire.

**Reactivity:** The product is non-reactive under normal conditions of use, storage and transport. Flammable solid. Self-heating: may catch fire.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

**SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Mechanically recover the product. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Handle under inert gas. Protect from moisture. Do not allow contact with water. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Ground/bond container and receiving equipment. Maintain air gap between stacks/pallets.


SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium fluoride (K(HF2)) (7789-29-9)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Carbonic acid, dipotassium salt (584-08-7)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable. Flammable solid. In contact with water releases flammable gases.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Relative vapour density at 20 °C: No data available
Relative density: Not applicable
Solubility: No data available
Log Pow: No data available
Auto-ignition temperature: Not applicable
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive limits: Not applicable
Explosive properties: No data available
Oxidising properties: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport. Flammable solid. Self-heating: may catch fire.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use. In contact with water releases flammable gases.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7). Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Water, humidity.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral): Oral: Harmful if swallowed.
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

ATE US (oral) 541.896 mg/kg bodyweight

Potassium fluoride (K(HF2)) (7789-29-9)
LD50 oral rat 160 mg/kg
ATE US (oral) 160 mg/kg bodyweight

Carbonic acid, dipotassium salt (584-08-7)
LD50 oral rat 1870 mg/kg
ATE US (oral) 1870 mg/kg bodyweight

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Suspected of damaging fertility or the unborn child.
STOT-single exposure: Not classified
STOT-repeated exposure: Not classified
Aspiration hazard: Not classified
**Viscosity, kinematic**  :  No data available

**Symptoms/effects after skin contact**  :  Burns.

**Symptoms/effects after eye contact**  :  Serious damage to eyes.

**Symptoms/effects after ingestion**  :  Burns.

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Ecology - general**  :  The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Before neutralisation, the product may represent a danger to aquatic organisms.

| Carbonic acid, dipotassium salt (584-08-7) | EC50 Daphnia 1 | 630 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia) |

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

**Waste treatment methods**  :  Dispose of contents/container in accordance with licensed collector’s sorting instructions.

### SECTION 14: Transport information

**Department of Transportation (DOT)**

In accordance with DOT

Not applicable

**Transportation of Dangerous Goods**

Not applicable

**Transport by sea**

Not applicable

**Air transport**

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

| Potassium fluoride (K(HF2)) (7789-29-9) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Carbonic acid, dipotassium salt (584-08-7) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |

#### 15.2. International regulations
### 15.3. US State regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium fluoride (K(HF2)) (7789-29-9)</td>
<td>U.S. - New Jersey - Right to Know Hazardous Substance List</td>
</tr>
<tr>
<td>Carbonic acid, dipotassium salt (584-08-7)</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 16: Other information

Full text of H-statements:

- **H302** Harmful if swallowed.
- **H361** Suspected of damaging fertility or the unborn child.

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**SDS US (GHS HazCom 2012)**

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Lucas-Milhaupt, Inc.