1. Product and Company Identification

Identity (as used on label & list): Baum’s Novacool UEF
Product Description: Water Soluble Surfactants and Water
Intended Use: Firefighting foam concentrate for use on class A fires mixed at 0.4% in water, for use on class B fires mixed at 0.5% in water.

Manufacturer: Baum’s Castorine Co., Inc.
200 Matthew Street
Rome, New York 13440
USA
800-825-8154

2. Hazards Identification

Hazardous Classification:

Pictogram: None
Signal word: None

Under conditions of intended use this product is not considered hazardous and does not pose a risk to health.

Overview; Ingredients not listed as a carcinogen by IARC, NTP, or OSHA
DOT Hazard Class: Not Applicable
Threshold Value Limit (TLV): Not Determined

Signs and Symptoms of Exposure:

| - Eyes | May cause eye irritation. No permanent damage anticipated from acute exposure. |
| - Skin | May cause skin irritation, No permanent damage anticipated from acute exposure. Prolonged contact with product may cause discomfort. |
| - Ingestion | Not expected to be a primary route of exposure, will produce gastrointestinal discomfort, nausea, vomiting, diarrhea |
| - Inhalation | Not expected to be a primary route of exposure, vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of nose and throat characterized by coughing. Aspiration of liquid will cause irritation to respiratory tract |

3. Composition/Information on Ingredients

Novacool UEF is a blend of organic surfactants being anionic, nonionic and amphoteric surfactants. Novacool UEF does not contain PFOS or PFOA.

4. First Aid Measures

**Inhalation:** Remove to fresh air. If irritation persists, seek medical attention. If breathing has stopped, assist ventilation with a mechanical device or use rescue breathing with a pocket mask.

**Skin:** Wash skin with water. remove all contaminated clothes and shoes. Thoroughly clean clothes and shoes before reuse. Consult a physician if irritation develops.

**Eyes:** Flush with water for 15 minutes. If eye irritation persists, seek medical attention.
**Ingestion:** If swallowed, get immediate medical attention or advice. If victim is conscious and able to swallow, give large amounts of water. Do not give anything by mouth to the person who is unconscious or convulsing. Do not induce vomiting unless directed by a physician.

**5. Fire Fighting Measures**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto Ignition Temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Classification</td>
<td>Not Flammable</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Special Fire Fighting Procedures: NFPA Code: Health 1, Fire 0, Reactivity 0
Use water spray to cool fire-exposed surfaces to prevent over-pressure of containers and to protect personnel. Use air-supplied breathing equipment for enclosed areas.

**6. Accidental Release Measures**

- **Containment Procedures**: Stop flow of material if without risk. Dike spill with inert absorbent. Block any potential routes to water systems, sewers, streams, lakes, etc.

- **Clean-Up Procedures**: Wear appropriate protective equipment and clothing. Absorb with inert absorbent, shovel material into appropriate container for disposal.

- **Evacuation Procedures**: Keep unnecessary personnel away.

**7. Handling and Storage**

- **Handling Procedures**: Avoid contact with skin and eyes. Observe good industrial hygiene practices and wash thoroughly after handling.

- **Technical Measures**: Work practices should minimize contact.

- **Technical Precautions**: Local exhaust is normally not required unless the process produces a mist.

- **Storage Procedures**: Store in tightly closed original container, in well ventilated place, away from strong acids. Prevent from freezing. If frozen, move to warn area.

**8. Exposure Controls/ Personal Protection**

- **Ventilation Engineering Controls**: Ventilation should effectively remove and prevent any buildup of any vapor or mist generated from the use of this product

- **Personal Protection Equipment (PPE)**

  - **Respiratory Protection**: If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA rated respiratory protection must be provided.
  - **Skin Protection**: Use Impervious gloves. Use of impervious apron and boots are recommended
  - **Eye/Face Protection**: Wear safety glasses, chemical goggles or a full face shield.
  - **Other Protective Clothing / Equipment**: None.

**9. Physical and Chemical Properties**

- **Physical State**: Liquid
Appearance and Color | Light yellow
Freezing Point | 30°F, -1.1°C
Boiling Point approximately | 212°F, 100°C
Odor | Faintly Ammoniacal
Vapor Pressure (mmHg) | equivalent to water
Vapor Density (air=1) less than | equivalent to water
Solubility in Water | Complete
Specific Gravity (H₂O=1) approximately | 1.036
Weight/Gallon(lb.) | 8.64
Burning Properties | Oxides of carbon and nitrogen may be produced after all moisture is boiled off.

10. Stability and Reactivity

Chemical Stability: This is a chemically stable material.
Conditions to Avoid: Heat from fire sufficient to overpressure container.
Materials to Avoid: Strong acids and oxidizers
Hazardous Decomposition or Byproducts: Material will not decompose in use or storage. Oxides of carbon, nitrogen may be produced after all moisture is boiled off in a fire.
Hazardous Polymerization: Will not occur.

11. Toxicological Information

Eyes | Will cause irritation and conjunctivitis depending on length of exposure, solution concentration and first aid measures provided.
Skin | Prolonged contact with product may cause discomfort, no adverse effects expected form absorption of material through skin
Ingestion | Not expected to be a primary route of exposure. Rat oral LD₅₀ is greater than 5000 milligrams/kilogram of body weight
Inhalation | Vapors or mists in unusually high concentration, in poorly ventilated areas may cause irritation of nose and throat.
Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No

12. Ecological Information

The product is not expected to be hazardous to the environment.

Mobility: This product is soluble in water and will spread in water systems
Degradability: Complete 30 day 51.6%. Surfactant components are inherently bio-degradable.
### Table 1
**Summary of Test Results**
**0.4% End Use Product**

<table>
<thead>
<tr>
<th>Test</th>
<th>Endpoint</th>
<th>Value</th>
<th>95% Confidence Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Daphnia magna</em> - Acute</td>
<td>LC50</td>
<td>37,613 ppm</td>
<td>34,818 to 40,631 ppm</td>
</tr>
<tr>
<td>Rainbow trout - Acute</td>
<td>LC50</td>
<td>9,600 ppm</td>
<td>6,400 to 12,800 ppm</td>
</tr>
<tr>
<td>Green Algae - Chronic</td>
<td>IC50</td>
<td>3,517 ppm</td>
<td>2,838 to 4,070 ppm</td>
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</tbody>
</table>

#### Analytical Testing

<table>
<thead>
<tr>
<th>Test</th>
<th>Duration</th>
<th>Value</th>
<th>% of Total Product Biodegradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>na</td>
<td>3012 mg/L</td>
<td>na</td>
</tr>
<tr>
<td>Biological Oxygen Demand (BOD)</td>
<td>5 day</td>
<td>1118 mg/L</td>
<td>37.1 %</td>
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<tr>
<td>Biological Oxygen Demand (BOD)</td>
<td>30 Day</td>
<td>1554</td>
<td>51.6 %</td>
</tr>
</tbody>
</table>

### 13. Disposal Considerations

Waste Material Disposal of in accordance with Local, State and Provincial Environmental Regulations.

Treat container as residue.

### 14. Transport Information

Not Regulated

### 15. Regulatory Information

- **DOT Hazard Class:** Not regulated
- **EPA Hazardous Substances:** None
- **SARA 311/312 Hazards:** Immediate (Acute) Health Hazard
- **SARA Title III:** none
- **California Proposition 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
- **Governmental Inventory Status:** All components comply with TSCA, DSL, AICS, NZIoC, ENCS, KECI, PICCS and IECSC.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>US NFPA Codes</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS Codes</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
<td>Section 8</td>
</tr>
</tbody>
</table>

The information on this SDS reflects the latest information that we have on hazards, properties, and handling of this product under recommended conditions of use. This company believes this information to be accurate and reliable however, the accuracy and completeness is not guaranteed.