MATERIAL SAFETY DATA SHEET

BLAST Fortified Heavy-Duty Cleaner/Degreaser

MANUFACTURER
The Butcher Company
67 Forest Street
Marlborough, MA 01752-3012

Butcher Telephone Number: 800-225-9475
Emergency Telephone (24 hours): 800-228-5635 Ext 118

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/Use: BLAST Fortified Heavy-Duty Cleaner/Degreaser

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>CAS NO.</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>3 – 5</td>
</tr>
<tr>
<td>Ethoxylated alkyl amine</td>
<td>61791-14-8</td>
<td>1 – 3</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits

NA - Not Applicable

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological Information)

PRIMARY ROUTE(s) OF EXPOSURE:

- X Eye
- X Skin Contact
- ___ Skin Absorption
- X Inhalation
- X Ingestion

EFFECTS OF ACUTE EXPOSURE

EYES:
Causes eye burns. Symptoms may include pain, tearing, redness, and eye injury.

SKIN:
Causes skin burns. Symptoms may include pain, redness, swelling, scarring, and skin damage.

INHALATION:
High concentrations of vapor or mist may cause nose, throat and respiratory tract irritation. Symptoms may include coughing, wheezing and shortness of breath.

INGESTION:
Harmful if swallowed. May cause mouth, throat and stomach burns. Symptoms may include nausea, vomiting, diarrhea, and severe stomach pain.
EFFECTS OF CHRONIC EXPOSURE:
Prolonged inhalation of high concentrations of concentrated alkaline materials above exposure limits (See Section 8, Exposure Controls/Personal Protection) can cause respiratory tract injury.

MEDICAL CONDITIONS AGGRAVATED:
May aggravate pre-existing eye, skin and respiratory conditions.

4. FIRST AID MEASURES

EYES:
Immediately flush eyes with plenty of water while holding eyelids apart. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Do not put any medication in the victim's eyes unless instructed by a physician. Get immediate medical attention.

SKIN:
Immediately flush with plenty of water for at least 15 minutes, then wash with soap and water. Immediately remove contaminated clothing. Get medical attention if irritation develops or persists. Thoroughly wash (or discard) clothing before reuse. Destroy contaminated shoes.

INHALATION:
Remove to fresh air. If not breathing, give respiration; if breathing is difficult, give oxygen (by trained personnel only). Get immediate medical attention.

INGESTION:
Do not induce vomiting. Rinse mouth out with water. Drink large quantities of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

FLASH POINT AND METHOD: >200°F 93°C TCC

FLAMMABLE LIMITS:
Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

EXTINGUISHING MEDIA:
Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS:
Normal products of combustion (carbon monoxide and carbon dioxide).

FIRE AND EXPLOSION HAZARDS:
None known.

FIRE FIGHTING INSTRUCTIONS:
This product is not flammable. As in any fire, MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear should be worn.
6. ACCIDENTAL RELEASE MEASURES

See Section 8, Exposure Controls/Personal Protection and Section 3, Hazard Identification. Floors may be slippery. Use care to avoid falling. Ventilate spill area. Contain and isolate spill. Keep non-essential personnel from entering spill area. Use mop and absorbent to collect material for proper disposal. Use non-metallic implements for cleaning and collection. Rinse area with water.

7. HANDLING AND STORAGE

HANDLING:
Follow label use directions. Do not mix with other chemicals unless instructed by label directions. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling. Immediately remove contaminated clothing. Wash clothing and equipment before reuse. Destroy contaminated shoes. Empty containers retain residue and may be hazardous (See Section 14, Transport Information.).

STORAGE:
Keep container closed when not in use. Store away from incompatible materials. (See Section 10, Stability and Reactivity).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE:
Where eye contact is possible, wear chemical splash goggles (ANSI Z87.1-approved).

SKIN:
Where skin contact is possible, chemical-resistant gloves should be worn. When additional skin contact is possible, other protective equipment and clothing (e.g., footwear) may be needed. All contaminated clothing should be removed immediately and cleaned (or discarded) before reuse.

RESPIRATORY:
No respiratory protection is required if ventilation is adequate and airborne concentrations are kept below exposure limits. When exposure limits may be exceeded, use appropriate respiratory protection (NIOSH/MSHA-approved) to prevent overexposure.

ENGINEERING CONTROLS:
General room ventilation is expected to be adequate. If user operations generate vapor or mist, ventilation should be used to keep airborne concentrations below exposure limits.
EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>OSHA PEL/STEL</th>
<th>ACGIH TLV/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>2 mg/m³ /(Ceiling)</td>
<td>2 mg/m³ /(Ceiling)</td>
</tr>
<tr>
<td>Ethoxylated alkyl amine</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

NE - Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

- PHYSICAL STATE: Liquid
- ODOR: Mild
- APPEARANCE: Clear, Blue
- pH: 13.8
- PERCENT VOLATILE BY WEIGHT: 94
- VAPOR PRESSURE: Not Determined
- VAPOR DENSITY: Not Determined
- BOILING POINT: Not Determined
- FREEZING/MELTING POINT: Not Determined
- SOLUBILITY IN WATER: Complete
- EVAPORATION RATE: Not Determined
- SPECIFIC GRAVITY: 1.05
- VISCOSITY: Water Thin
- OCTANOL/WATER PARTITION COEFFICIENT: Not Determined
- ODOR THRESHOLD: Not Determined

10. STABILITY AND REACTIVITY

- STABILITY (CONDITIONS TO AVOID): Stable.
- POLYMERIZATION: Will not occur.
- HAZARDOUS DECOMPOSITION: None.
- INCOMPATIBLE MATERIALS: Oxidizers (e.g., bleach), strong acids (e.g., hydrochloric acid) and reactive metals (e.g., aluminum).

11. TOXICOLOGICAL INFORMATION

ACUTE DATA:
This product is corrosive to the eyes and skin. The following data are available for product ingredients:
BLAST Fortified Heavy-Duty Cleaner/Degreaser

<table>
<thead>
<tr>
<th>PRODUCT/INGREDIENT</th>
<th>ORAL LD₅₀ (rat)</th>
<th>DERMAL LD₅₀ (rabbit)</th>
<th>INHALATION LC₅₀ (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydroxide</td>
<td>Not Available</td>
<td>1350 mg/kg</td>
<td>Not Available</td>
</tr>
<tr>
<td>Ethoxylated alkyl amine</td>
<td>750 mg/kg</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

SENSITIZATION DATA:
No data available.

CHRONIC DATA:
Repeated inhalation of high concentrations of alkaline materials has been reported to cause impairment of lung function with shortness of breath, chemical pneumonia and pulmonary edema.

REPRODUCTIVE/TERATOGENIC DATA:
No data available.

CARCINOGENIC/MUTAGENIC DATA:
Not listed as carcinogenic by NTP, IARC, or ACGIH or regulated as a carcinogen by OSHA.

SYNERGISTIC MATERIALS:
No data available.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Disposal of this material should be in accordance with local, state or provincial and federal regulations. The unused product, as manufactured, is a RCRA hazardous waste (Corrosive-D002) in accordance with 40 CFR 261. The product has not been evaluated by the Toxicity Characteristic Leachate Procedure (TCLP). According to RCRA, it is the responsibility of the waste generator to ensure proper disposal.

14. TRANSPORT INFORMATION

DOT/TDG HAZARDOUS MATERIAL DESCRIPTION: Corrosive Liquid, N.O.S.
DOT/TDG TECHNICAL NAME: Sodium hydroxide solution
DOT/TDG HAZARD CLASS: 8
UN ID No./PI.N. No.: 1824
DOT/TDG PACKING GROUP: III
NAERG: 154

15. REGULATORY INFORMATION

Not meant to be all-inclusive—selected regulations represented.
UNITED STATES
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
311/312 HAZARD CATEGORIES: Under 40 CFR 370.2, this product meets the following hazard categories:
Immediate, Delayed.
313 REPORTABLE INGREDIENTS: Ingredients in this product are not currently subject to notification.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA REGULATORY: Not reportable under CERCLA.

TSCA (TOXIC SUBSTANCE CONTROL ACT)
TSCA STATUS: This product complies with all TSCA inventory requirements.

USDA (U.S. DEPARTMENT OF AGRICULTURE):
This product is authorized for use in federally inspected meat and poultry plants.

MASSACHUSETTS, NEW JERSEY, PENNSYLVANIA RIGHT-TO-KNOW:

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>CAS NO.</th>
<th>STATE LISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>MA, NJ, PA</td>
</tr>
<tr>
<td>Ethoxylated alkyl amine</td>
<td>61791-14-8</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

NA - Not Applicable

CANADA
WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):
Class E- Corrosive material. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th>NFPA RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>* 3</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
</tr>
<tr>
<td>REACTIVITY</td>
<td>0</td>
</tr>
<tr>
<td>PERSONAL PROTECTION</td>
<td>-</td>
</tr>
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</table>

MSDS STATUS
New MSDS
The information on this data sheet represents our current data and best opinion as to the proper use in handling of the product under normal foreseeable conditions. Any use of this product which is not in conformance with this data sheet or product label, or which involves using the product in combination with any other product or any other process is the responsibility of the user.