MATERIAL SAFETY DATA SHEET

BUST UP Heavy Duty
Solvent-Based
Cleaner/Degreaser

MSDS Ref. No: 4322
Date Prepared: 03/14/2002
Date Revised: 08/16/2002

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME/USE: BUST UP Heavy Duty Solvent-Based 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
CHEMTREC (U.S./Can.): 800-424-9300
CHEMTREC (Int’l): +1 703-527-3887

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>CAS#</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>10 - 25</td>
</tr>
<tr>
<td>Sodium xylene sulfonate</td>
<td>1300-72-7</td>
<td>5 - 7</td>
</tr>
<tr>
<td>Linear primary alcohol ethoxylate</td>
<td>34380-01-1</td>
<td>5 - 7</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>3 - 5</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>6834-92-0</td>
<td>1 - 3</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits  NA - Not Applicable

OSHA REGULATORY STATUS: This product is classified as hazardous under OSHA regulations.

WHMIS CLASS: Class E

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

POTENTIAL HEALTH EFFECTS (See Section 11 for Toxicological Information)

PRIMARY ROUTE(s) OF EXPOSURE:  X  Eye  X  Skin Contact  X  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. May be absorbed through the skin and may cause effects as described under Inhalation (see below).

INHALATION: High concentrations of vapor or mist may cause nose, throat and respiratory tract irritation. Symptoms may include coughing, wheezing, shortness of breath and a disagreeable metallic taste. High concentrations of vapor or mist may also cause central nervous system effects including headache, dizziness and nausea.

INGESTION: Harmful if swallowed. May cause mouth, throat and stomach burns. Symptoms may include nausea, vomiting, diarrhea, and severe stomach pain. May also cause central nervous system effects including headache, dizziness and...
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: > 93°C (200°F)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), oxides of sulfur and oxides of sodium.

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 general room ventilation is adequate and airborne concentrations are kept below exposure limits. When exposure limits are exceeded, use appropriate respiratory protection (NIOSH/MSHA) to prevent overexposure.

ENGINEERING CONTROLS: Good 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>2-Butoxyethanol</td>
<td>25 ppm 120 mg/m3 /</td>
<td>25 ppm 121 mg/m3 /</td>
</tr>
<tr>
<td>Sodium xylene sulfonate</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Linear primary alcohol ethoxylate</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>NA</td>
<td>Ceiling</td>
</tr>
<tr>
<td>Sodium metasilicate</td>
<td>2 mg/m3 /</td>
<td>2 mg/m3 /</td>
</tr>
<tr>
<td></td>
<td>Ceiling</td>
<td>Ceiling</td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

NA - Not Available

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Solvent
APPEARANCE: Clear, Red-Violet
pH: 13.0 to 14.0
PERCENT VOLATILE BY WEIGHT: 83
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: 1.068
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 known.

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 expected to be corrosive to the eyes and skin due to its high alkalinity. Acute overexposure to high concentrations of 2-butoxyethanol by skin absorption, ingestion and inhalation has caused blood, liver, and kidney effects in laboratory animals. The following data are available for product ingredients:
PRODUCT/INGREDIENT | ORAL LD$_{50}$ (rat) | DERMAL LD$_{50}$ (rabbit) | INHALATION LC$_{50}$ (rat) |
--- | --- | --- | --- |
2-Butoxyethanol | 470 - mg/kg | 220 - mg/kg | 450 - ppm (4-hr) |
Sodium xylene sulfonate | 650 - 4000 mg/kg | 3000 - mg/kg | Not Available |
Linear primary alcohol ethoxylate | 700 - 1700 mg/kg | >2000 - mg/kg | Not Available |
Sodium hydroxide | Not Available | 1350 - mg/kg | Not Available |
Sodium metasilicate | 600 - 1153 mg/kg | Not Available | Not Available |

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. Prolonged overexposure to high concentrations of 2-butoxyethanol by skin absorption, ingestion and inhalation has caused blood, liver and kidney effects in laboratory animals.

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

This product is made with all biodegradable detergents. No other 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, basic, inorganic, n.o.s.
- **DOT/TDG TECHNICAL NAME:** Sodium hydroxide, sodium metasilicate
- **DOT/TDG HAZARD CLASS:** 8
- **UN ID No./P.I.N. No.:** 3266
- **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:** 2-Butoxyethanol is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 under the chemical category Glycol Ethers.

**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.

**MASSACHUSETTS, NEW JERSEY, PENNSYLVANIA RIGHT-TO-KNOW:**
INGREDIENT(S)                  CAS NO.  STATE LISTING
Water                           7732-18-5  Not Listed
2-Butoxyethanol                 111-76-2   MA, NJ, PA
Sodium xylene sulfonate        1300-72-7  Not Listed
Linear primary alcohol ethoxylate 34398-01-1 Not Listed
Sodium hydroxide                1310-73-2  MA, NJ, PA

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

HMIS RATING

HEALTH                     3
FLAMMABILITY               0
REACTIVITY                 0
PERSONAL PROTECTION        -

NFPA CODES:

APPROVED BY: Product Safety & Regulatory

MSDS STATUS
Revision No: 2

Revision #: 2

This MSDS replaces the March 14, 2002 MSDS. Any changes in information are as follows:
In Section 14
DOT Proper Shipping Name DOT Technical Name DOT UN/NA Number

APPROVAL DATE: 08/16/2002

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.