1. PRODUCT AND COMPANY IDENTIFICATION

Product Name/Use: BREAKDOWN Apple Odor Eliminator

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 NO.</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viable bacterial cultures</td>
<td>NA</td>
<td>5 – 7</td>
</tr>
<tr>
<td>Alkoxylated fatty alcohol</td>
<td>69227-21-0</td>
<td>3 – 5</td>
</tr>
<tr>
<td>Linear primary alcohol ethoxylate</td>
<td>34398-01-1</td>
<td>1 – 1.5</td>
</tr>
<tr>
<td>Fragrance</td>
<td>NA</td>
<td>1 – 1.5</td>
</tr>
</tbody>
</table>

See Section 8 for Exposure Limits

OSHA REGULATORY STATUS: This product is classified as hazardous under OSHA regulations.
WHMIS CLASS: Class D- Division 2B

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:
May cause mild eye irritation. Symptoms may include redness and tearing.

SKIN:
May cause mild skin irritation. Symptoms may include redness. Organisms used in this product are non-pathogenic, but can cause infection when in contact with open wounds.

INHALATION:
High concentrations of vapor or mist may cause nose, throat and respiratory tract irritation. Symptoms may include coughing.
INGESTION:
May cause mild mouth, throat and stomach irritation. Symptoms may include nausea.

EFFECTS OF CHRONIC EXPOSURE:
Prolonged or repeated contact can cause defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

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

4. FIRST AID MEASURES

EYES:
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 medical attention.

SKIN:
Flush with water, then wash with soap and water. Remove saturated clothing. Get medical attention if irritation develops or open wounds are present.

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

INGESTION:
Do not induce vomiting. Drink large quantities of water. Get medical attention.

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. Contain and isolate spill. Keep non-essential personnel from entering spill area. Use mop, absorbent, or wet vacuum to collect material for proper disposal. 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 and skin. Avoid breathing mist. Wash thoroughly after handling. Remove saturated clothing. Wash clothing and equipment before reuse.

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 safety glasses with side shields or chemical splash goggles (ANSI Z87.1 approved).

SKIN:
Where skin contact is possible, chemical-resistant clothing (e.g., gloves) should be worn.

RESPIRATORY:
No respiratory protection is required if ventilation is adequate.

ENGINEERING CONTROLS:
Good general room ventilation is expected to be adequate.
EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>INGREDIENT(S)</th>
<th>OSHA PEL/STEL</th>
<th>ACGIH TLV/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viable bacterial cultures</td>
<td>NA</td>
<td>NA</td>
</tr>
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<td>Alkoxylated fatty alcohol</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Linear primary alcohol ethoxylate</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Fragrance</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

NA - Not Available

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid
ODOR: Apple
APPEARANCE: Slightly Hazy, Light Green
pH: 7.0 to 9.3
PERCENT VOLATILE BY WEIGHT: 96
VAPOR PRESSURE: Not Available
VAPOR DENSITY: Not Available
BOILING POINT: Not Available
FREEZING/MELTING POINT: Not Available
SOLUBILITY IN WATER: Complete
EVAPORATION RATE: Not Available
SPECIFIC GRAVITY: 1.000
VISCOSITY: Water Thin
OCTANOL/WATER PARTITION COEFFICIENT: Not Available
ODOR THRESHOLD: Not Available

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID):
Stable.

POLYMERIZATION:
Will not occur.

HAZARDOUS DECOMPOSITION:
None.

INCOMPATIBLE MATERIALS:
Oxidizers (e.g., bleach). Strong acids and bases may inactivate cultures.

11. TOXICOLOGICAL INFORMATION

ACUTE DATA:
Based on testing of a similar product, this product may cause mild eye and skin irritation; it is not considered to be toxic by ingestion. The following data are available for product ingredients.
PRODUCT/INGREDIENT | ORAL LD₅₀ (rat) | DERMAL LD₅₀ (rabbit) | INHALATION LC₅₀ (rat)
--- | --- | --- | ---
Viable bacterial cultures | Not Available | Not Available | 9.2 mg/L (4-hr)
Alkoxylated fatty alcohol | 2300 mg/kg | Not Available | Not Available
Linear primary alcohol ethoxylate | 700–1700 mg/kg | >2000 mg/kg | Not Available
Fragrance | Not Available | Not Available | Not Available

SENSITIZATION DATA:
No data available.

CHRONIC DATA:
No data available.

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 non-hazardous waste 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: Not regulated

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 category: Immediate.
313 REPORTABLE INGREDIENTS: Ingredients in this product are not currently subject to notification.
CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)
CERCLA REGULATORY: None of the ingredients in this product are 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>
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<tr>
<td>Viable bacterial cultures</td>
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<td>Not Listed</td>
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<td>Alkoxylated fatty alcohol</td>
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</table>

NA - Not Applicable

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):
Class D-Division 2B, eye irritant. 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>
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</tr>
<tr>
<td>1</td>
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<tr>
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</tr>
<tr>
<td>0</td>
<td>REACTIVITY</td>
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MSDS STATUS
Revision #: 1

This MSDS replaces the May 04, 2001 MSDS. Any changes in information are as follows:
In Section 4
Firstaid - Ingestion
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.