1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TUFF STUFF® Foam Cleaner (Non-Aerosol)

Manufactured for:
The Armor All / STP Products Company
1221 Broadway
Oakland, CA  94612
Telephone:  (510)271-7000

Product Type
Foam Cleaner

Stock
AS190, AS195, AS195-55, AS195-6, AS195CAN

Formula
13479-122

Emergency Phone Numbers
For Medical Emergencies Call:  1-800-446-1014
For Transportation Emergencies Call: 1-800-424-9300 (Chemtrec)

2 COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Materials</th>
<th>Material</th>
<th>%</th>
<th>CAS #</th>
<th>Exposure Limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-Butoxyethanol</td>
<td>1-5</td>
<td>111-76-2</td>
<td>50 ppm TWA skin</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20 ppm TWA skin</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Sodium Metasilicate</td>
<td>1-5</td>
<td>10213-79-3</td>
<td>None Established</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>Non-ionic Surfactant</td>
<td>1-5</td>
<td>68439-50-9</td>
<td>None Established</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Non-Hazardous Ingredients Greater Than 1%

Water 70-95 7732-18-5 None Established (3)

None of the ingredients is listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.

The Permissible Exposure Limits (PEL) reported above are the pre-1989 limits that were reinstated by OSHA following a decision by the 11th Circuit Court of Appeals. These PELs are being enforced by Federal OSHA. Be aware that more restrictive limits may be enforced by some states. The Armor All / STP Products Company recommends that the lower exposure limits be observed as reasonable worker protection.

The source for exposure limits listed above are:
1. OSHA Permissible Exposure Limit (PEL)
2. ACGIH Threshold Limit Value (TLV)
3. Both the OSHA PEL and ACGIH TLV
4. Recommended by the Manufacturer
HAZARDS IDENTIFICATION

Principal Hazards

Warning

• This product is clear to a slight hazy colored liquid with a citrus odor.
• Accidental ingestion of this material may cause mucous membrane and gastrointestinal irritation with possible nausea and vomiting.
• May cause eye irritation.

See Section 11 for complete health hazard information

KEEP OUT OF REACH OF CHILDREN

FIRST AID

Swallowing

No emergency care anticipated

Skin

Flush with water.

Inhalation

Remove to fresh air.

Eyes

Flush with plenty of water. Seek medical attention if discomfort persists.

Notes To Physician

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.

FIRE FIGHTING MEASURES

Flash Point (Method)

No flash (TOC, PMCC)

Upper Flammable Limit

Not determined

Lower Flammable Limit

Not determined.

Extinguishing Media

This product is not combustible. Use any media that is appropriate for the surrounding fire.

Special Firefighting Procedures

Use self contained breathing apparatus in fire in confined area

Unusual Fire and Explosion Hazards

None

Combustion Decomposition

Carbon monoxide and carbon dioxide.

Auto-ignition Temperature

Not determined
Explosion Data

No data available.

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ACCIDENTAL RELEASE MEASURES

Spill

Wear appropriate personal protective equipment. Collect and contain for proper disposal.

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HANDLING AND STORAGE

Handling Procedures

- Avoid contact with eyes.
- Avoid prolonged or repeated contact with the skin and clothing.
- Avoid breathing vapors
- Use with adequate ventilation
- Wash exposed skin thoroughly with soap and water after use.

Storage Procedures

- No special storage required.

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EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation Procedures

General ventilation should be adequate for normal use. For operations where the TLV may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

Gloves Protection

Chemical resistant gloves such as butyl rubber or Saranex recommended where needed to prevent prolonged/repeated skin contact.

Eye Protection

Chemical safety goggles or faceshield is recommended if needed to prevent eye contact.

Respiratory Protection

None needed under normal use conditions. For operations where the TLV may be exceeded, a NIOSH/MSHA approved organic vapor respirator with a dust/mist pre-filter or supplier air respirator is recommended. Equipment selection depends on containment type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

Clothing Recommendation

None under normal use conditions.

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PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure

18 mm Hg

pH

Not determined

Specific Gravity

8.33 lbs/gal

Water Solubility

100%

Percent Volatile

98%
**Vapor Density**  
Greater than 1

**Evaporation Rate**  
Less than 1

**Odor**  
Citrus odor

**Appearance**  
Clear to slightly hazy liquid

**Viscosity**  
Not determined

**Boiling Point**  
212°F

**Freezing Point**  
32°F

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**Stability and Reactivity**

**Stability**  
Stable

**Incompatibility**  
None

**Polymerization**  
Will not occur

**Hazardous Decomposition**  
When heated to decomposition, carbon dioxide and carbon monoxide are produced.

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**Toxicological Information**

**Oral Toxicity**  
The product is no more than slightly toxic and may cause nausea.

**Eye Irritation**  
May cause minimal irritation.

**Skin Irritation**  
May cause minimal irritation.

**Dermal Toxicity**  
No evidence of adverse effects from available information.

**Inhalation Toxicity**  
May be mildly irritating to mucous membranes. At high concentrations, may cause drowsiness.
Acute Toxicity Values

2-Butoxyethanol: LD50 Oral rat: 470 mg/kg
LC50 Inhalation rat: 450 ppm/4 hr
LD50 Skin rabbit: 220 mg/kg

Sodium metasilicate: LD50 Oral rat: 1153 mg/kg
Non-ionic Surfactant: No data available

Sensitization
Based on data from the components this product is not expected to cause skin or respiratory sensitization.

Chronic Toxicity
Animals receiving repeated oral doses of 2-butoxyethanol, a component of this product, developed hemolytic anemia and secondary injury to the kidney and liver.

Carcinogenicity
No evidence of carcinogenicity from available information

Mutagenicity
2-Butoxyethanol has been found to be mutagenic in bacteria (S. typhimurium).

Reproductive Toxicity and Teratogenicity
2-Butoxyethanol has been found to cause adverse reproductive effects in laboratory animals (both effects on fertility and developmental abnormalities by inhalation and oral routes).

Aquatic/Terrestrial Toxicity
No data is available at this time.

Disposal Considerations
Dispose in accordance with federal, state and local regulations.

U.S. DOT Non-Bulk Shipping Description
None - Not Regulated

ID Number None
Hazard Class None
Packing Group None
Label None
Markings None
Placards None
IMDG Code Shipping Description NONE - NOT REGULATED
Technical Name NONE
ID Number: NONE
Hazard Class: NONE
Packing Group: NONE
Markings: NONE
Label: NONE
Placards: NONE
IMDG Page #: NONE.

14 TRANSPORT INFORMATION continued)
Air - IATA Shipping Description: None - not regulated

Technical Name: None
ID Number: None
Hazard Class: None
Packing Group: None
Markings: None
Label: None

15 REGULATORY INFORMATION
U.S. TSCA Inventory/other TSCA Regulations: All of the components of this product are listed on the TSCA inventory.

SARA Ext. Haz. Subst.: None.

SARA Section 313: This product contains the following toxic chemicals 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 (SARA 313 - Toxic Chemical Release Reporting)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Weight %</th>
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<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>1-5%</td>
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CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product does not contain chemicals regulated by the State of California under proposition 65.

EEC EINECS: All of the ingredients are listed on the EINECS inventory.
Canada
All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

Australia
All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

16 OTHER INFORMATION

NFPA Code
Health: 1  Fire: 0  Reactivity: 0

HMIS Code
Health: 1  Fire: 0  Reactivity: 0

Precautionary Labels
Observe all requirements of plant, company or government regulations. "Empty" containers retain product residue and can be hazardous. Do not re-use empty containers without proper cleaning. Keep out of the reach of children. Do not take internally.

Revision Indicators
Supersedes: July 23, 1999  Revised Sections: Revised Exposure Limit (Section 2)

General
This MSDS is directed to professional users and bulk handlers of the product or its ingredients. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations and in some instances might differ from the information provided herein.