Material Safety Data Sheet

1. Product And Company Identification

Product Name: TUFF STUFF® Foam Cleaner

Responsible Party: The Armor All/STP Products Company
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810

Information Phone Number: +1 203-205-2900

Emergency Phone Number:
For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada)
For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for Outside US and Canada (call collect)

MSDS Date Of Preparation: 09/17/12
Product Use: Automotive maintenance product – For consumer and professional use

2. Hazards Identification

EMERGENCY OVERVIEW
WARNING
Contents under pressure. Heated can may rupture. Eye irritant. Avoid eye contact. Use with adequate ventilation.

3. Composition/Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isobutane (Propellant)</td>
<td>75-28-5</td>
<td>3-7%</td>
</tr>
<tr>
<td>Ethylene glycol monobutyl ether</td>
<td>111-76-2</td>
<td>1-5%</td>
</tr>
<tr>
<td>Non-Hazardous Ingredients</td>
<td>Mixture</td>
<td>Balance</td>
</tr>
</tbody>
</table>

4. First Aid Measures

Inhalation: If symptoms of exposure develop, remove to fresh air. Seek medical attention if symptoms persist.

Skin Contact: Wash exposed skin with plenty of soap and water. Remove contaminated clothing, and launder before reuse. If skin irritation or redness develops, seek medical attention.

Eye Contact: Flush eyes with large amounts of water for 15 minutes. If irritation or other symptoms persist, seek medical attention.

Ingestion: If the victim is fully conscious, have them drink a glass of water. Get medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.

5. Firefighting Measures

Extinguishing Media: Use dry chemical, carbon dioxide, foam, or water spray.

Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool fire-exposed containers with water. Use shielding to protect against bursting cans.
Unusual Fire Hazards: Contents under pressure. Containers may explode if exposed to temperatures of 120°F and above.

Hazardous Combustion Products: Thermal decomposition will generate oxides of carbon.

6: Accidental Release Measures

Personal Precautions: Wear appropriate protective equipment. Ventilate the area.

Environmental Precautions: Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations.

Methods for Containment and Clean-Up: Place leaking can in a pail in a well ventilated area away from ignition sources until pressure has dissipated. Absorb with an inert material. Collect into a suitable container for disposal. Rinse area with water.

7. Handling and Storage

Avoid contact with eyes. Avoid prolonged contact with skin, and clothing. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Remove contaminated clothing, and launder before reuse.

Keep containers closed when not in use. Keep out of the reach of children. Do not puncture or incinerate containers.

Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. U.F.C (NFPA 30B) Level 1 Aerosol.

8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>CHEMICAL</th>
<th>EXPOSURE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isobutane</td>
<td>1000 ppm TWA ACGIH TLV (aliphatic hydrocarbon gas)</td>
</tr>
<tr>
<td>Ethylene glycol monobutyl ether</td>
<td>20 ppm TWA ACGIH TLV</td>
</tr>
<tr>
<td></td>
<td>50 ppm TWA OSHA PEL (Skin)</td>
</tr>
<tr>
<td>Non-Hazardous Ingredients</td>
<td>None Established</td>
</tr>
</tbody>
</table>

Ventilation: General ventilation should be adequate for all normal use. For operations where the TLV may be exceeded, forced ventilation such as local exhaust may be needed to maintain exposures below applicable limits.

Respiratory Protection: None under normal use conditions. For operations where the TLV may be exceeded, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134; all applicable laws and regulations; and good industrial hygiene practice.

Gloves: Impervious gloves are recommended for prolonged or repeated skin contact.

Eye Protection: None required for normal use. Avoid eye contact. Safety glasses or goggles are recommended if eye contact is possible.

Other Protective Equipment/Clothing: As needed to avoid prolonged or repeated skin contact.
9. Physical and Chemical Properties

**Appearance And Odor:** White foam in an aerosol can with a citrus odor

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH:</strong></td>
<td>8.1 – 8.5</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>212°F (100°C)</td>
</tr>
<tr>
<td><strong>Freezing Point:</strong></td>
<td>32°F (0°C)</td>
</tr>
<tr>
<td><strong>Solubility In Water:</strong></td>
<td>100%</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Coefficient Of Water/Oil Distribution:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash Point:</strong></td>
<td>No flash</td>
</tr>
<tr>
<td><strong>Flammability Limits:</strong></td>
<td>LEL: Not determined</td>
</tr>
<tr>
<td><strong>Vapor Pressure:</strong></td>
<td>18 mm Hg @ 68°F</td>
</tr>
<tr>
<td><strong>Vapor Density:</strong></td>
<td>&gt; 1</td>
</tr>
<tr>
<td><strong>Autoignition Temp:</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flammability Limits:</strong></td>
<td>UEL: Not determined</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

**Stability:** Stable

**Conditions To Avoid:** Avoid heat and direct sunlight. Do not puncture container.

**Incompatibility:** Oxidizers.

**Hazardous Decomposition Products:** Thermal decomposition will generate oxides of carbon.

11. Toxicological Information

**Acute Hazards:**

**Inhalation:** No adverse effects expected from the normal use of this product.

**Skin Contact:** Prolonged or repeated contact may cause irritation.

**Eye Contact:** Contact causes eye irritation with redness, tearing, and pain.

**Ingestion:** Swallowing may cause gastrointestinal disturbances.

**Chronic Hazards:** None known for mixture.
Ethylene glycol monobutyl ether: In animals, effects have been reported on the following organs: blood (hemolysis) and secondary effects on the kidney and liver. Human red blood cells have been shown to be significantly less sensitive to hemolysis than those of rodents and rabbits.

**Medical Conditions Aggravated By Exposure:** None currently known.

**Carcinogen:** None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA.

**Acute Toxicity Values:**
Isobutane: LC50 Rat inhalation 570,000 ppm / 15 min
Ethylene glycol monobutyl ether: LC50 Rat inhalation 450 ppm / 4 hr; LD50 Rat oral 470 mg/kg; LD50 Rabbit dermal 220 mg/kg.
12. Ecological Information

Ethylene glycol monobutyl ether: LC50 Daphnia magna (Water flea) 1,720 mg/L/24 hr;
LC50 Lepomis macrochirus (Bluegill) 1,490 mg/L/96 hr

13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations. Offer empty containers for recycling. Do not incinerate or place container into trash compactor.

14. Transport Information

DOT Hazardous Materials Description: Consumer Commodity ORMD

Canadian TDG Hazardous Materials Description: Consumer Commodity. Limited Quantity.

IMDG Dangerous Goods Description: UN1950, Aerosols, n.o.s., 2.1

15. Regulatory Information

United States:

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA Section 103: This product has no RQ. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.


SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

Canada:

Canadian WHMIS Classification: Class A (Compressed Gas), Class D-2-B (Toxic material causing other toxic effects)

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian DSL, or NDSL.

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Rating (NFPA 704): Health: 1 Fire: 4 Instability: 0
HMIS Rating: Health: 1 Fire: 2 Reactivity: 0

REVISION SUMMARY: Changes to sections 2, 4, 11, & 15.
DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH