CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tuff Stuff® Foam Cleaner (Aerosol)

	Manufactured for: The Armor All / STP Products Company 39 Old Ridgebury Road Danbury, CT 06810 Telephone: (203)205-2900		
Product Type	Aerosol Foam Cleaner		
Stock	AS192, AS192CAN, AS194, AS197		
Formula	13647-66		
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				
Hazardous Materials	Material	%	CAS #	Exposure Limit	Source
	2-Butoxyethanol	1-5	111-76-2	20 ppm TWA skin 50 ppm TWA skin	(2) (1)
	Non-Ionic Surfactant	1-5	68439-50-9 or 68131-39-5	None Established	(3)
	Isobutane (propellant)	3-7	75-28-5	None Established	(3)
Non-Hazardous Ingredients Greater Than	Water	70-90	7732-18-5	None Established	(3)

1%

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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.

2	COMPOSITION / INFORMATION ON INGREDIENTS (continued)		
3	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	Caution		
	 Dispenses as a white foam with a citrus odor. May cause minimal eye and skin irritation. Inhalation may be minimally irritating to mucous membranes. High concentration may cause drowsiness. Swallowing of the liquid product may cause nausea. See Section 11 for complete health hazard information 		
	KEEP OUT OF REACH OF CHILDREN		
4	FIRST AID		
Swallowing	If symptoms develop, get medical attention by calling a physician, Poison Control Center, or hospital emergency room.		
Skin	Remove contaminated clothing. Flush skin with water. If skin irritation or redness persists seek medical attention.		
Inhalation	May be mildly irritating. If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek medical attention.		
Eyes	Exposed eyes should be flushed with copious amounts of water . If irritation, pain, swelling or tearing persist, seek medical attention.		
Notes To Physician	There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.		
5	FIRE FIGHTING MEASURES		
Flash Point (Method)	TOC: No Flash PMCC: No Flash		
Aerosol Flame Extension	None		
Flashback	None		
Aerosol Fire Protection Level	Level 1 Aerosol (NFPA30B)		

5	FIRE FIGHTING MEASURES (continued)		
Upper Flammable Limit	None determined		
Lower Flammable Limit	None determined		
Extinguishing Media	Carbon dioxide or dry chemical for small fire. Water fog for large fire.		
Special Firefighting Procedures	Use self contained breathing apparatus when entering a confined space. Cool fire exposed containers and structures with water.		
Unusual Fire and Explosion Hazards	Aerosol can may explode if heated above 120°F.		
Combustion Decomposition	Carbon monoxide and carbon dioxide may be produced		
Auto-ignition Temperature	Not determined		
Explosion Data	Propellant can form explosive mixtures with air. Aerosol cans may explode in a fire.		
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6	ACCIDENTAL RELEASE MEASURES		
6 Spill	· · · · · · · · · · · · · · · · · · ·		
	ACCIDENTAL RELEASE MEASURES Wear appropriate personal protective equipment. Remove all sources of ignition. Collect material for disposal in a container suitable for		
Spill 7 Handling Procedures	ACCIDENTAL RELEASE MEASURES Wear appropriate personal protective equipment. Remove all sources of ignition. Collect material for disposal in a container suitable for flammable waste. HANDLING AND STORAGE • WARNING: Contents Under Pressure • Use with adequate ventilation. • Do not puncture of incinerate.		
Spill 7	ACCIDENTAL RELEASE MEASURES Wear appropriate personal protective equipment. Remove all sources of ignition. Collect material for disposal in a container suitable for flammable waste. HANDLING AND STORAGE WARNING: Contents Under Pressure Use with adequate ventilation.		
Spill 7 Handling Procedures	ACCIDENTAL RELEASE MEASURES Wear appropriate personal protective equipment. Remove all sources of ignition. Collect material for disposal in a container suitable for flammable waste. HANDLING AND STORAGE • WARNING: Contents Under Pressure • Use with adequate ventilation. • Do not puncture of incinerate.		
Spill 7 Handling Procedures Storage Procedures	 ACCIDENTAL RELEASE MEASURES Wear appropriate personal protective equipment. Remove all sources of ignition. Collect material for disposal in a container suitable for flammable waste. HANDLING AND STORAGE WARNING: Contents Under Pressure Use with adequate ventilation. Do not puncture of incinerate. Do not expose to heat or store at temperatures above 120°F. 		

Eye Protection	Chemical safety glasses or faceshield is recommended to prevent eye contact.	
8	EXPOSURE CONTROLS / PERSONAL PROTECTION (cont'd)	
Respiratory Protection	None needed under normal use conditions. If the concentrations exceed the Threshold Value Limit (TLV), a NIOSH/MSHA approved full facepiece, air-supplied respirator or self-contained breathing apparatus 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	Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.	
9	PHYSICAL AND CHEMICAL PROPERTIES	
Vapor Pressure	- 18 mm Hg @ 68°F	
рH	8.1-8.5	
Specific Gravity	Not determined	
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. Dispenses as a white foam.	
Viscosity	Not determined.	
Boiling Point	212° F	
Freezing Point	32 ° F	
10	STABILITY AND REACTIVITY	
Stability	Stable	
Incompatibility	None	
Polymerization	Will not occur	

Carbon monoxide or carbon dioxide

Hazardous Decomposition

11	TOXICOLOGICAL INFORMATION	
Oral Toxicity	No evidence of adverse effects from available information.	
Eye Irritation	May cause minimal eye irritation.	
Skin Irritation	May cause minimal skin irritation.	
Dermal Toxicity	A component of this product, 2-butoxyethanol can penetrate skin readily, however, because of low concentrations in this product, toxicity resulting from skin absorption is unlikely unless contact is extensive or prolonged.	
Inhalation Toxicity	Breathing vapors or mists may cause minimal irritation of the mucous membranes. High concentrations may cause drowsiness.	
Acute Toxicity Values Sensitization	 2-Butoxyethanol: LD50 Oral rat: 470 mg/kg LC50: Inhalation rat: 450 ppm/4 hr LD50: Skin rabbit: 220 mg/kg Isobutane: LC50 Inhalation rat: 1041 gm/m3/2 hr Surfactant: LD50 Oral rat: 3.2 g/kg Based on data from the components this product not expected to cause skin or respiratory sensitization. 	
Chronic Toxicity	Animal 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		
Environmental Fate		

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DISPOSAL CONSIDERATIONS

ECOLOGICAL INFORMATION

No data is available at this time.

Waste Disposal Dispose of in accordance with applicable federal, state and local regulations. Do not puncture or incinerate container.

TRANSPORT INFORMATION

U.S. DOT Non-Bulk Shipping Description	Consumer Commodity
ID Number Hazard Class Packing Group Markings Label Placards IMDG Code Shipping Description	ORM - D None Consumer Commodity/ORM-D in a rectangle on one side None
Packaging Group Label Markings Placards IMDG Page #	2 None None
Air - IATA Shipping Description	Aerosols, non-flammable, n.o.s., 2.2, UN1950
0	UN1950 2.2
15	REGULATORY INFORMATION
U.S. TSCA Inventory/ other TSCA Regulations.	All of the components of this product are listed on the TSCA inventory. This product is not subject to export notification.
SARA Ext. Haz. Subst.	None.

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15	REGULATORY INFORMATION (c	ontinued)		
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)			
	Chemical Name CAS# Weight %			
	2-Butoxyethanol (glycol ether)	111-76-2	1-5	
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.			
Australia	All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.			
Canada	All of the components of this product are listed on the Canadian Domestic Substances List (DSL).			
16	OTHER INFORMATION			
NFPA Code	Health: 1 Fire: 3 Reactivity:	0		
HMIS Code	Health: 1 Fire: 3 Reactivity:	0		
Precautionary Labels	Observe all requirements of plant, company or government regulations. Keep out of the reach of children. Do not take internally.			
Revision Indicators	Supersedes: October 20, 1999	Revised Sections: (New Company Ad	Section 1 dress and Telephone)	
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.			