

BORE CLEANING FOAM, BCF-3**Section I PRODUCT IDENTITY**

Mfg.: Break-Free Inc. an Armor Holdings Inc. Company 13386 International Parkway Jacksonville, FL 32218	Trade Name: Bore Cleaning Foam BCF-3	Description: Aerosol Foaming Bore Cleaner	Information Phone: 800-433-2909
	DOT Class: Flammable Gas NOS – UN 1950	NFPA Rating: Health=1, Fire=1, Reactivity=0	Date Prepared: January 24, 2007
			Supersedes: November 14, 2005
			Prepared By: Don Yoder

TRANSPORTATION EMERGENCY PHONE NUMBER: CHEM-TEL, INC. 1-800-255-3924 (U.S. and Canada) OR 1-813-979-0626 (call collect)

Section II HAZARDOUS INGREDIENT/IDENTITY INFORMATION

Chemical or Common Name:	CAS Numbers:	PEL:	TLV:	STEL:	% WT
Propane	74-98-6	NE	1000 ppm	NE	10.0
Butane	106-97-8	NE	800 ppm	NE	10.0
n-Methyl-2-Pyrrolidone	872-50-4	NE	10 ppm	NE	4.5
Alcohol Derivatives	141-43-5	NE	3 ppm	6 ppm	20 - 30
Water	7732-18-5	NA	NA	NA	50 - 55

NOTE: All SARA Title III materials have been reported. All ingredients contained in this formula are listed on the Toxic Substances Control Act (TSCA) Chemical Inventory.

Section III PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: 100°C (212°F) Initial	Specific Grav.: 0.86	Sol. in Water: Nil
Vapor Pres.: 0.04 at 20°C as acetate	Appearance: White color	Evaporation Rate: <0.03, butyl acetate = 1
Vapor Density: 5.9	Odor: Slight Odor	% Volatile: 75 % by weight
Pour Point: <-40°C (-40°F)	VOC: 20.0 % by weight	

Section IV FIRE & EXPLOSION HAZARD DATA

Flash Point: -60°C (-50°F) PMCC **Flammability Limits:** NE **Autoignition Threshold:** NE

Extinguishing Media: Carbon Dioxide, Foam, Dry Chemical

Fire Fighting Procedures: Use normal procedures for oil/solvent mixtures. Firefighters should wear NIOSH approved, positive pressure self-contained breathing apparatus to avoid exposure from decomposition products. Proper eye and skin protection should be used. If a spill has not ignited, use water spray to disperse vapors and keep container cool.

Unusual Fire & Explosion Hazards: Water and foam may cause frothing. After ignition, the use of water can scatter the liquid thereby possibly spreading the fire. Ignition may also produce dense black smoke.

Section V REACTIVITY DATA

Stability: Stable **Incompatibility:** Avoid strong oxidizing agents. **Hazardous Polymerization:** Will not occur.

Conditions to avoid: Sources of ignition such as sparks, hot spots, welding, flames, and cigarettes.

Hazardous Decomposition Products: Oxides of Carbon, Sulfur and Nitrogen.

Section VI

HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation, Ingestion, Skin, Eyes.

Inhalation: Respiratory irritation and discomfort may be experienced if mists of materials resembling mineral oils are breathed at air concentrations exceeding recommended exposure levels. Excessive inhalation can cause respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headaches, and possible unconsciousness.

Eyes: Possible transient irritation

Skin: Possible slight to moderate redness may occur with extended daily exposure. Not classified as a primary skin irritant or corrosive.

Ingestion: The mixture has a low level of toxicity (LD50 > 5g/kg). May cause irritation to digestive tract; and if inhaled as liquid, may cause absorption through the lungs resulting in systemic effects.

Acute Health Hazards: While expected to be non-irritating from the skin, eye and oral testing done, as with all petroleum products, prolonged and repeated contact on the skin could cause irritation and possible dermatitis. The synthetic oils and additives could also be absorbed through abraded skin, but the results of dermal toxicity tests suggest that no acute systemic effects would be expected in healthy individuals.

Chronic Health Hazards: No data available to indicate product or components are chronic health hazards.

Medical Conditions Generally Aggravated by Exposure: Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to this material.

EMERGENCY AND FIRST AID PROCEDURES: Follow good industrial hygiene practices: Flush eyes immediately with water for at least 15 minutes, wash skin with soap and water, launder contaminated clothing before re-use. If swallowed, do **NOT** induce vomiting. If conscious, drink large quantities of water and seek immediate medical attention. If inhaled, move to fresh air. Anesthetic or narcotic effects could occur from overexposure to vapors, so call a physician; if available, give oxygen. If breathing stops, give mouth-to-mouth resuscitation.

NOTE: This material is not known to contain any carcinogen required to be listed under the *Hazard Communication Standard* (29CFR 1910.1200) from the *National Toxicology Program* (NTP) or the *International Agency for Research on Cancer* (IARC) sources.

Section VII

PRECAUTIONS FOR SAFE HANDLING & USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Small Spills: Wipe up small spills or use absorbent material to soak up. Store in closed containers. **DO NOT FLUSH TO SEWER.**

Large Spills: If in a poorly ventilated area, evacuate personnel and equip the clean-up crew with respiratory and skin/eye protection. Follow normal industrial practices for cleaning solvent/oil spills. Use proper protective equipment, dike the area to confine the spill, shut off potential ignition sources and use a good absorbent to soak up the spill. Always store the waste in closed containers.

Disposal: Dispose of all wastes in accordance with federal, state and local regulations. Treat this type of waste as waste oil. Incineration is normally preferred. Never dump into the sewer or on the ground or into any navigable waters, streams, lakes or rivers.

Precautions to be Taken in Storage & Handling: Do not store above 120°F. Do not use around open flames. Maintain adequate ventilation and keep from children. Note that some vapors are heavier than air and can collect in low areas such as pits and storage tanks. Do not enter those areas where large quantities of vapors are suspected of collecting until exchanging the air or using special breathing apparatus with an observer present for possible assistance.

Section VIII

CONTROL MEASURES

Respiratory Protection: Not required in unconfined or well ventilated areas. For emergencies or for working in confined areas with low air exchange rates, follow OSHA Std. 29CFR 1910.134.

Ventilation: General dilution or local exhaust sufficient to maintain adequate air exchange to avoid vapor build-up.

Protective Gloves: Polyethylene, neoprene or PVC advised for prolonged and repeated contact.

Eye Protection: Although irritation or damage to the eyes is unlikely, it is advised to comply with OSHA Standard 29CFR 1910.133..

Other Protective Clothing: Not required.

Work and Hygienic Practices: Do not smoke, eat or drink while using this product. Wash hands with soap and water before smoking, eating, drinking or using toilet facilities. Launder contaminated clothing before re-use.