



MATERIAL SAFETY DATA SHEET			
IDENTITY (AS USED ON LABEL AND LIST) <b>SmartWash ® TORNADO F-1</b>		PAGE <b>2 of 2</b>	Date: <b>December 22, 2004</b>
SECTION 4 - FIRE FIGHTING MEASURES			
FLASH POINT Non-flammable	NFPA RATING None	FLAMMABLE LIMITS LEL: Not applicable UEL: Not applicable	
EXTINGUISHING MEDIA Carbon dioxide, water, water fog, dry chemical, chemical foam.			
SPECIAL FIRE FIGHTING PROCEDURES Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released. Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			
SECTION 5 - ACCIDENTAL RELEASE MEASURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes. Wash small spills to sanitary sewer. Large spills - confine spill, soak up with approved absorbent, shovel product into approved container for disposal. This is a regulated product, refer to CERCLA 40 CFR 302 for detailed instructions concerning reporting requirements.			
SECTION 6 - HANDLING AND STORAGE			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extremetemperatures. Keep this and other chemicals out of reach of children.			
SECTION 7- EXPOSURE CONTROLS / PERSONAL PROTECTION			
RESPIRATORY PROTECTION (SPECIFY TYPE) None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.			
VENTILATION LOCAL EXHAUST: Required MECHANICAL (GENERAL): Yes	SPECIAL: To maintain minimum TWA and STEL levels. OTHER: Engineering and work controls as required.		
PROTECTIVE GLOVES: Neoprene, butyl or nitrile rubber gloves with cuffs.	EYE PROTECTION: Chemical safety goggles.		
OTHER PROTECTIVE CLOTHING OR EQUIPMENT Coveralls, apron, or other equipment should be worn to minimize skin contact, safety eyewash station nearby.			
WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.			
SECTION 8 - PHYSICAL / CHEMICAL PROPERTIES			
BOLING POINT: 212° F	SPECIFIC GRAVITY (WATER = 1) 1.06	pH 12.5 - 13.0	SOLUBILITY IN WATER Complete
VAPOR PRESSURE (MM Hg) 17 mm Hg @ 20 ° C	VAPOR DENSITY (AIR = 1) > 1	EVAPORATION RATE (WATER = 1) < 1	% VOLATILE (BY WEIGHT) 88.10%
APPEARANCE AND ODOR Purple liquid, characteristic detergent odor			
SECTION 9 - STABILITY AND REACTIVITY			
UNSTABLE: INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers, strong acids.	STABILITY STABLE: XXX	CONDITIONS TO AVOID: Extreme temperatures	
HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.			
HAZARDOUS POLYMERIZATION MAY OCCUR:	WILL NOT OCCUR: XXX	CONDITIONS TO AVOID: None	
SECTION 10 - DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations for alkaline materials. Consult your local, state, or Federal Environmental Protection Agency before Disposing of any chemicals.			
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