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Version 1

1. IDENTIFICATION

Product Name <i>SmartWash</i> ® Tornado F1	Supplier Name and Address Whiting Systems, Inc. 9000 Highway 5 North Alexander, AR 72002 800-542-9031	Emergency Telephone INFOTRAC 352-323-3500 (International) 800-535-5053 (North America)
Recommended Use Cleaning agent.		

2. HAZARDS IDENTIFICATION

Signal word
Danger**Hazard statements**

Causes severe skin irritation and eye damage

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 1

**Appearance** Purple liquid**Physical state** Liquid**Odor** Characteristic Detergent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Rinse mouth Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%	Trade Secret
Sodium metasilicate pentahydrate	10213-79-3	1 - 5	*
Sodium hydroxide	1310-73-2	.05 - 1	*

4. FIRST AID MEASURES

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Wash mouth and nasal passages with water repeatedly. Call a physician immediately.**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.**Ingestion** Rinse mouth. Do NOT induce vomiting. Drink plenty of water or milk immediately. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.**Skin Contact** Wash with soap and water. DO NOT attempt to neutralize with chemical agents. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.**Most important symptoms and effects, both acute and delayed****Symptoms:** May cause irritation to the mucous membranes and upper respiratory tract. Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness. Exposed individuals may experience eye tearing, redness and discomfort. Contact will cause irritation and redness to exposed areas. Irritates the digestive tract.**Note to physicians** Treat symptomatically. Existing conditions aggravated by exposure: skin disorders, skin allergies, respiratory disorders, eye disorders.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Carbon dioxide (CO₂). Water spray (fog). Dry chemical. Chemical foam.**Unsuitable Extinguishing Media** Not determined**Specific hazards arising from the chemical** Keep containers cool with water spray to prevent container rupture due to steam buildup. Material is alkaline and will irritate the eyes if product is allowed to directly contact the eyes.**Protective equipment and precautions for firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment as required.**Environmental precautions:** Not Determined**Methods for containment:** Confine and absorb into approved absorbent **Methods for cleaning up:** Place in appropriate containers for disposal.

7. HANDLING AND STORAGE

Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use personal protection recommended in Section 8. Protect container from physical damage.**Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Protect from extreme temperatures.**Incompatible materials:** Strong oxidizing agents. Strong Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 10 mg/m ³
1310-73-2		(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³

Engineering Controls

Apply technical measures to comply with the occupational exposure limits. Provide sufficient mechanical ventilation to maintain exposure below TLV(s). Provide Eyewash stations.

Individual protection measures, such as personal protective equipment

- Eye/face protection** Wear approved safety goggles.
- Skin and body protection** Neoprene, butyl or nitrile rubber gloves with cuffs. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
- Respiratory protection** Under normal conditions, respirator is not normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Values	Remarks • Method	Property	Values
pH	12.5 - 13		Specific Gravity	1.06
Melting point/freezing point	Not determined	Boiling point 100 °C / 212 °F	Flash point Non-flammable	
Evaporation rate	<1	(water = 1)	Kinematic viscosity	Not Determined
Flammability (solid, gas)	n/a-liquid		Dynamic viscosity	Not Determined
Flammability Limits in Air			Explosive properties	Not Determined
Upper flammability limits	Not applicable		Oxidizing properties	Not Determined
Lower flammability limit	Not applicable		Autoignition temperature	Not Determined
Vapor pressure	17 mm Hg	@ 20 °C	Solubility in other solvents	Not Determined

10. STABILITY AND REACTIVITY

- Reactivity** Not reactive under normal conditions
- Chemical stability** Stable under recommended storage conditions.
- Possibility of Hazardous Reactions** None under normal processing.
- Hazardous polymerization** Hazardous polymerization does not occur. Non-hazardous endothermic polymerization may occur in both the liquid and gas phases.
- Conditions to avoid** Extreme temperatures.
- Incompatible materials** Strong oxidizing agents. Strong alkalis. Metals. Cyanides. sulfides. Glass. Ceramics.
- Hazardous Decomposition Products** Decomposition will not occur if handled and stored properly.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure		Component Information			
Inhalation	Harmful if inhaled.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Eye contact	Causes serious eye damage.	Sodium hydroxide	-	= 1350 mg/kg (Rabbit)	-
Skin Contact	Causes severe skin irritation	1310-73-2			
Ingestion	Do not taste or swallow	Other adverse effects Not determined	Carcinogenicity Not classifiable as a carcinogen.		

12. ECOLOGICAL INFORMATION

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal **Other adverse effects** Not determined

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes/Contaminated packaging: Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status: Sodium hydroxide 1310-73-2 Toxic Corrosive

14. TRANSPORT INFORMATION

DOT Not regulated **IATA** Not regulated **IMDG** Not regulated

15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312 Hazard Categories

U.S. State Right-to-Know Regulations

Chemical Name	NJ	MASS	PENN
Sodium hydroxide	X	X	X
1310-73-2			

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lb			X
1310-73-2				
Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)	
Sodium hydroxide	1000 lb		RQ 1000 lb final RQ	
1310-73-2			RQ 454 kg final RQ	

16. OTHER INFORMATION

NFPA	Health hazards	Flammability	Instability	Special Hazards	HMIS	Health hazards	Flammability	Physical hazards	Personal protection
	Not determined	Not determined	Not determined	Not determined		1	0	0	Not Determined

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.