

1. Identification

Name of the product: Force Four SDS Code: FBS FF r1
 Recommended use: Industrial cleaner Date prepared: June 18, 2015
 Use not recommended: Not for use as a body wash.
 Company: Fred Brewer Sales
 P.O. Box 376 412 N Hwy 277
 Elgin, OK 73538 Fletcher, OK 73541
 Telephone: 580-492-4656 fax: 580-549-6123
 email address: fredbrewersales@tds.net
 Transportation Emergency Number: Chemtrec 800-424-9300

2. Hazards identification

GHS Classification in accordance with 29 CFR 1910

OSHA Hazards:

Skin corrosion, Category 1 H313 Harmful in contact with skin.
 Serious eye damage, Category 1 H318 Causes serious eye damage.

GHS Label elements, including precautionary statements

Pictogram



Signal word: Danger

Hazard statements:

H313 Harmful in contact with skin.
 H318 Causes serious eye damage.

Precautionary statements:

P260 Do not breathe dust or mist.
 P264 Wash skin thoroughly after handling.
 P273 Avoid release to the environment.
 P281 Use personal protective equipment as required
 Keep out of waterways.
 No toxicity information was found for sodium hydroxide CAS 1310-73-2 present at 4.68%

3. Composition / Information on ingredients

Chemical identity:	Sodium hydroxide	4.68%
Common name:	Caustic soda	
Numbers of identity:	CAS 1310-73-2 EC 215-185-5	
Chemical identity:	Nonyl phenol ethoxylate	0.41%
Common name:	NPE, NP9	
Numbers of identity:	CAS 68412-54-4	
Impurities and other components:	None which affect categorization.	

4. First-aid measures

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P302+352 IF ON SKIN: Wash with soap and water
 P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
 Rinse skin with water.
 P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a
 position comfortable for breathing
 P305+351+338 IF IN EYES: Rinse continuously with water for several minutes.
 Remove contact lenses if present and easy to do; continue rinsing.
 Most important symptoms and effects, both acute and delayed: Severe eye irritation. Skin irritation.
 Indication of any immediate medical attention and special treatment needed when necessary:
 P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

5. Firefighting measures

Suitable extinguishing media : Product is not flammable.
 Use equipment appropriate for the main cause of a fire.
 Precautions: Special protective equipment for firefighters: No special protective equipment required.
 Flash point: Does not flash.
 Autoignition temperature: Does not ignite.
 Specific hazards in case of fire: None.
 Special protective equipment and precaution for fire fighters:
 Wear self contained breathing apparatus for fire fighting if necessary.

6. Accidental release measures

Personal precautions:
 Spill may be slippery. Avoid breathing vapors.
 Environmental precautions:
 Prevent spills from entering storm sewers or drains and contact with soil.
 Methods and materials for containment and cleaning up:
 Vacuum or mop up for possible use or reclaim. Common industrial absorbents may be used.
 Dispose as non hazardous waste.

7. Handling and storage

Precautions for safe handling:
 Avoid contact with eyes. Avoid prolonged or repeated skin contact and breathing mists/vapors.
 Conditions for safe storage, including incompatibilities:
 Standard safe storage conditions are appropriate: avoid package damage and extremes in temperature: below 32° and above 120°F. Keep package closed tightly.

8. Exposure controls / personal protection

Information on the system design:

Product is intended for external use only. Stay up wind, out of any spray developed.

Exposure Limits: Reference 29CFR 1910.1000 Table Z-1.

Component Name (CAS)		TWA ¹	STEL
		ppm mg/m3	ppm mg/m3
Sodium hydroxide (CAS 1310-73-2)		C 2 mg/m3**	
Nonyl phenol ethoxylate (CAS 68412-54-4)		NE*	NE*

*NE= Not Established **Also OSHA Table Z-1 and NIOSH

Personal protective equipment

Respiratory protection: No requirement anticipated.
 Hand protection: Rubber gloves.
 Eye protection: Safety glasses with side-shields.
 Skin and body protection: Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

Hygiene measures : Wash hands and face before breaks and immediately after handling the product.
 Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance: Clear thin purple liquid
 Odor: Slight "butyl"
 Odor threshold: Not available
 pH-value: Approx. 12.7
 Melting point: Not available
 Freezing Point: Not available
 Initial boiling point: Approximately 100°C.
 Flash point: Does not flash.
 Evaporation rate: Not available
 Flammability (solid, gas): Not applicable
 Explosion limits: Not explosive
 Vapor pressure: (highest partial vapor pressure) at 20°C: Not available
 Vapor density: Not available
 Relative density (water=1.00): 1.03 approx.
 Solubility: Totally soluble in water at 20°C
 Partition coefficient: Log Kow = Not applicable to mixture.
 Auto-ignition temperature: Not available
 Decomposition temperature: Not available
 Viscosity: Like water

10. Stability and reactivity

Chemical stability: No decomposition, if used according to specifications.
 Possibility of hazardous reactions: None known
 Conditions to avoid: No dangerous conditions known.
 Materials to avoid: No common materials present a hazard.
 Hazardous decomposition products: None are known. Also see Section 5.

11. Toxicological information

Acute Toxicity: No information available for finished product.

Test	Sodium hydroxide CAS 1310-73-2	Nonyl phenol ethoxylate CAS 68412-54-4
Oral Toxicity LD 50 (Rats)	No data	4,000 mg/kg
Dermal Toxicity LD 50 (Rabbit)	No data	No data.
Inhalation Toxicity, Vapor	No data	No data.
Eye Irritation (Rabbit)	Corrosive	No data.
Dermal Irritation (Rabbit)	Severe burns	No data.

Likely/ possible routes of exposure: Ingestion, skin and eye contact.

Skin: The product is not expected to be toxic by skin absorption.

Oral: The product is not expected to be toxic by ingestion.

Inhalation: The product is not expected to be toxic by inhalation.

H305 May be harmful if swallowed and enters airways

Irritation

H313 Harmful in contact with skin.

H318 Causes serious eye damage.

H402 Harmful to aquatic life

Sensitization: The product is not expected to be sensitizing.

Chronic toxicity: Prolonged skin contact may defat the skin and produce dermatitis.

Carcinogenicity: No component listed by NTP, IARC, OSHA or ACGIH as a suspect or potential carcinogen.

Summary Comments: Product may have a drying effect on the skin; frequent or prolonged contact may cause flaking or cracking of the skin.

12. Ecological information

Persistence and degradability: No data is available for the product itself.
 This product is expected to be inherently biodegradable.
 Bio-accumulative potential: There is no evidence to suggest bioaccumulation will occur.
 Ecotoxicity: The product has not been tested.
 The following data is reported for: Sodium hydroxide
 LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h
 LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h
 Nonyl phenol ethoxylate CAS 68412-54-4
 Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - > 10 mg/l - 96 h
 Mobility in soil: No data available.
 Results of PBT and vPvB assessment: No data available
 Other adverse effects: No data available.

13. Disposal considerations

Product as supplied is not an unlisted hazardous waste. Do not discharge to sewer.
 Dispose in accordance with local, state and federal regulations.

14. Transport information

Domestic transport: Not classified as dangerous goods under transport regulations.
 Sea transport (IMDG): Not classified as dangerous goods under transport regulations.
 Air transport (IATA/CAO): Not classified as dangerous goods under transport regulations.

15. Regulatory information

Inventory Status:
 All components are on TSCA, EINECS/ELINCS, AICS, and DSL.
 U.S. Regulations:
 U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
 SARA (311/312) HAZARD CATEGORIES: None
 Marine pollutant: None
 SARA 313: This product contains the following SARA 313 Toxic Release Chemicals.

Chemical Name	CAS Number	Concentration
None	Not applicable	Not applicable

The following product components are cited on the lists below:

Chemical Name	CAS Number	List Citations
Sodium hydroxide	1310-73-2	MA, NJ, PA
Nonyl phenol ethoxylate	68412-54-4	PA, NJ
2-butoxyethanol	111-76-2	NJ, PA

California Prop. 65 chemicals: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
 No ingredient in this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

16. Other information

MSDS Preparation date: June 18, 2015
 Revising Hazards identification for SDS dated March 2, 2015.

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference
Immediate	Yes	No	No	No	49 CFR 171.8, OSHA 29 CFR 1910.1200 and SARA 302/311/312/313.
Delayed	No	No	XXX	XXX	
HMIS Hazard ratings: Health 2 Fire 0 Instability 0 Other B (Goggles, gloves)					
Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4					

This SDS contains all the information required for classification by the Canadian CPR.
 This SDS is designed for workplace employees, emergency personnel and for conditions and situations where there is a greater potential for large-scale or prolonged exposure, in accordance with requirements of the U.S. Government's Occupational Safety and Health Administration (OSHA).