

1. Identification

Name of the product: FBS Drilling Fluid Additive #12 SDS Code: FBS DFA 12
 Recommended use: Drilling fluid additive Date prepared: February 28, 2015
 Use not recommended: Not for use as a hand 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. Hazard(s) identification**GHS Classification in accordance with 29 CFR 1910**

OSHA Hazards:

Skin irritation, Category 3 H313 Harmful in contact with skin.
 Eye irritation, Category 2A H318 Causes serious eye damage.

GHS Label elements, including precautionary statements

Pictogram



Signal word: Caution

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.

3. Composition / Information on ingredients

Chemical identity:	Silicic acid, di sodium salt pentahydrate	20%
Common name:	Sodium metasilicate pentahydrate	
Numbers of identity:	CAS 10213-79-3	
Chemical identity:	Sodium carbonate	25%
Common name:	Soda ash	
Numbers of identity:	Numbers of identity: CAS 497-19-8	EC 207-838-8
Chemical identity:	Nonyl phenol ethoxylate	8%
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: Nitrogen and sulfur oxides produced if product is dried and burned.
 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	STEL
	ppm	ppm
Sodium metasilicate pentahydrate (CAS 10213-79-3)	NE*	NE*
Sodium carbonate (CAS 497-19-8)	NE*	NE*
Nonyl phenol ethoxylate (CAS 68412-54-4)	NE*	NE*

*NE= Not Established

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: Blue granular powder
 Odor: Slight soapy butyl
 Odor threshold: Not available
 pH-value: Not applicable. Alkaline in water solution.
 Melting point: Not available
 Freezing Point: Not applicable
 Initial boiling point: Not applicable
 Flash point: Does not flash.
 Evaporation rate: Not applicable
 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): Not available
 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: Free flowing powder

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 metasilicate penta hydrate CAS 10213-79-3	Nonyl phenol ethoxylate CAS 68412-54-4
Oral Toxicity LD 50 (Rats)	1500-3200 mg/kg	4,000 mg/kg
Dermal Toxicity LD 50 (Rabbit)	No data	No data.
Inhalation Toxicity, Vapor	No data	No data.
Eye Irritation (Rabbit)	No data	No data.
Dermal Irritation (Rabbit)	OECD 404 Corrosive.	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
 H315 Causes skin irritation
 H320 Causes eye irritation
 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:

This product is mainly inorganic, but water soluble.

Bio-accumulative potential: There is no evidence to suggest bioaccumulation will occur.

Mobility: Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

Ecotoxicity: The product has not been tested.

The following data is reported for

Sodium metasilicate penta hydrate CAS 10213-79-3

LC50: Fish *Gambusia affinis* 2320 ppm; 96 h

LC50: Flea *Daphnia magna* 247 ppm; 96h

LC50 Snail eggs *Lymnaea* 632 ppm; 96h

LC50 Amphipoda 160 ppm; 96h

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
2-butoxyethanol	111-76-2

RQ: Not possible in non bulk packaging.

The following product components are cited on the lists below:

Chemical Name	CAS Number	List Citations
Sodium metasilicate penta hydrate	10213-79-3	NJ, PA
Nonyl phenol ethoxylate	68412-54-4	NJ, PA
2-butoxyethanol	111-76-2	NJ, PA
Sodium carbonate	497-19-8	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.

16. Other information

SDS Preparation date: February 28, 2015

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference 49 CFR 171.8, OSHA 29 CFR 1910.1200 and SARA 302/311/312/313.
Immediate	Yes	No	No	No	
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					

MSDS's found from ingredient suppliers do not provide sufficient information for complete categorization of the hazards as of the date of preparation of this document. Expert opinion and judgment has been used where deemed necessary and appropriate.

Note: The information in this SDS was obtained from current reputable and competent sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product and to assume liability for loss, injury, damage or expense resulting from improper use of this product.