

## MATERIAL SAFETY DATA SHEET (MSDS)

### Sodium Silicate Neutral and Alkaline Glass Lumps

**PRODUCT NAME** : Sodium Silicate Neutral and Alkaline Glass

**HSN CODE NO.** : 28391900

**CAS No.** : 1344-09-8

**MANUFACTURER NAME** : SHREENATH MARKETING,

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**CHEMICAL COMPOSITION** : Non dusting homogeneous formulation of Soda Ash  
With Silica Sand.

**REACTION** :  $\text{Na}_2\text{CO}_3 + \text{SiO}_2 \xrightarrow{(1250^\circ \text{ to } 1300^\circ \text{ (C)})} \text{Na}_2\text{SiO}_3 + \text{CO}_2$

**EMERGENCY OVERVIEW:** (1) Appearance: Whitish/blue glass crystalline solid transparent lumps

(2) Odor: Odorless.

(3) Solubility in water: 99.99% Soluble.

(4) Physical state: small solid lumps.

(5) Size of glass: small lumps.

**HEALTH HAZARD** : (1) Causes Eye Irritation.

(2) Causes Skin Irritation.

(3) Causes Irritation to respiratory track.

(4) No known chronic hazard.

**GHS (GLOBALLY HARMONIZED SYSTEM) CLASSIFICATION:-**

HAZARD KEY : 4 - Sever

3 - Serious

2 - Moderate

1 - Slight

0 – Minimal

GHS: CONTACT HAZARD – SKIN : Category 2 - Causes skin irritation.

GHS: CONTACT HAZARD – EYE : Category 1 - Causes serious eye damage

GHS: ACUTE TOXICITY –INHALATION : No data available not classified

GHS: ACUTE TOXICITY – ORAL : Category 4 - Harmful if swallowed.

GHS: ACUTE TOXICITY –DERMAL : Not classified as acutely toxic for dermal exposure.

GHS: CARCINOGENICITY : Not classified as a carcinogen per GHS criteria. This product  
Is not.

(GHS stands for the **Globally Harmonized System of Classification and Labeling** of Chemicals.)

### **PERSONAL PROTECTIVE EQUIPMENT:-**

**(A) Respiratory Protection** : Use NIOSH approved mist respiratory where spray occurs.

**(B) Hand protection** : Rubber where contact likely.

**(C) Eye Protection** : Chemical goggles or face shield.

**(D) Other protective  
Equipment** : Safety shower and eye wash fountain should be within  
direct access.

**(E) Personal Hygiene** : Avoid contact with eyes, skin, and clothing. Wash hand  
thoroughly after handling. Change contaminated clothing and  
clean before re-use.

### **HANDLING OF SPILLS AND LEAKS:-**

**(A) Environmental Hazard:** High pH (alkalinity) of undiluted or non-neutralized material is harmful not a listed toxic chemical under SARA title III, -302, -304 or -313.

**(B) Waste Disposal Method:** Not a RCRA Hazardous waste. Neutralize with dilute acid and landfill Solids according to regulations. Flush neutral liquid to sewer with plenty of water.

**(C) First Aid Procedures:** In case of contact, immediately flush eyes or skin with plenty of water. Call a physician. Wash clothing before reuse.

**(D) Spillage:** Sinks and mixes with water.

**(E) Physical Hazard:** Dries to form glass film which can easily cut skin. Spills are very slippery. Can etch neither glass if nor promptly removed.

## **FIRE-FIGHTING MEASURES:-**

**Fire Hazard** : Not fire hazard.

**Sensitivity to Mechanical Impact** : Not sensitive.

**Sensitivity to Static Discharge** : Not sensitive.

**Lower Flammability Level (air)** : Not flammable

**Upper Flammability Level (air)** : Not flammable

**Flash point** : Not flammable

**Auto-ignition Temperature** : Not applicable

## **Safe Storage Conditions:-**

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas may be generated. Keep separated from incompatible substances.

## **Handling Procedures:-**

Do not get in eyes, on skin, or on clothing. Wash hand thoroughly with water after handling if gets contacted, keep container closed.

**Disposal Conditions:** - Dispose in accordance with federal, state and local regulations

**ALKALINE SODIUM SILICATE GALSS SPECIFICATION:**

(Na<sub>2</sub>O: SiO<sub>2</sub> = 1: 2.2 +/- 2%)

ALKALINE SODIUM SILICATE GALSS SPECIFICATION	
Description	Specification Alkaline Glass
Na <sub>2</sub> O (%)	30.80 to 31.50
SiO <sub>2</sub> (%)	68.30 to 68.70
Total Solid (%)	98.90 to 99.90
Weight Ratio (Na <sub>2</sub> O: siO <sub>2</sub> )	1:2.2 to 1:2.4
Molecular Ratio	2.30 to 2.40
Molecular weight	184-254
Iron Content (PPM)	50 PPM maximum
Alumina Content (PPM)	0.0001 maximum
Appearance	Solid lumps
Colour/ visibility	Light blue transparent
Size of Glass	Small lumps
Insoluble present in Glass (%)	0.12
P.H	11-13
Boiling Point (C°)	101.5 - 102
Water soluble (%)	100
Molecular formula	(Na <sub>2</sub> O) <sub>x</sub> · (SiO <sub>2</sub> ) <sub>y</sub>

**Product Use:-** Adhesives and binders, pulp and paper, deinking, detergents / soaps, catalysts, Textiles, drilling fluids, mineral processing, refractory, cements, pharmacy, Food Dyes, Ceramic, synthetic Zeolites, casting, foundry, Paint, precipitated silica, Cosmetics, water treatments, construction,

**Stability** : This material is stable under all conditions of use and storage.

**Conditions to avoid** : None.

**NEUTRAL SODIUM SILICATE GALSS SPECIFICATION:-**

(Na<sub>2</sub>O: SiO<sub>2</sub> = 1: 3.2 +/- 2%)

NEUTRAL SODIUM SILICATE GALSS SPECIFICATION	
Description	Specification Neutral Glass
Na <sub>2</sub> O (%)	23.00 to 23.20
SiO <sub>2</sub> (%)	76.10 to 76.80
Total Solid (%)	98.80 to 99.80
Weight Ratio (Na <sub>2</sub> O: siO <sub>2</sub> )	1:3.30 to 1: 3.32
Molecular Ratio	3.40 to 3.50
Molecular weight	184-254
Iron Content (PPM)	40 maximum
Alumina Content (PPM)	0.0001 maximum
Appearance	Solid lumps
Colour/ visibility	Colourless transparent
Size of Glass	Small lumps
Insoluble present in Glass (%)	0.14
P.H	11 - 12.5
Boiling Point (C°)	101.5 - 102
Water soluble (%)	100
Molecular formula	(Na <sub>2</sub> O) <sub>x</sub> · (SiO <sub>2</sub> ) <sub>y</sub>

**HMIS:** (SCALE 0-5) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Hazard Identification Ratings (SCALE 0-4)

**Flammability:** 0

**Reactivity Rating:** 0

**Health Rating:** 1

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**Addition Date** : March 2003; **Revision Date** : Nil

**OTHER INFORMATION:-**

The Information on This Safety Data Sheet Is Believed to Be Accurate and It Is the Best Information Available. No Liability Resulting from the Use or Handling of the Product to Which This Safety Data Sheet Relates. Users and Handlers of This Product Should Make Their Own Investigations to Determine the Suitability of The Information Provided Here in for Their Own Purposes.

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