



THE FENDER BCS GROUP OF COMPANIES

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SUPA-CURE WW

MATERIAL SAFETY DATA SHEET (Conforms to EC Directive 91/EEC)

1 Identification: Product Name: SUPA-CURE WW

2 Composition/Information on ingredients:

Chemical Name: Sodium silicate solution
 Chemical Formula: $\text{Na}_2\text{O}(\text{SiO}_2)_x$ where $x > 3.2$
 1344-09-8 Sodium silicate 12.5%20%
 7732-18-5 Water Balance

3 Hazard Identification: Alkaline solution. Avoid contact with eyes.

4 First Aid Measures:

Ingestion: Do not induce vomiting. Remove material from mouth. Drink 1 or 2 glasses of water (or milk). If large amount swallowed or symptoms develop obtain medical attention.
 Inhalation: Remove from source of exposure. Obtain medical attention if symptoms develop.
 Skin: Wash accidental spillage from skin. Obtain medical attention if symptoms develop.
 Eyes: Wash immediately with copious amounts of water and obtain medical attention.

5 Fire Fighting Measures: Not applicable. Aqueous solution. Will not support combustion.

6 Accidental Release Measures:

If possible contain spillage and absorb in earth or sand and shovel into suitable containers. If containment is not possible and material enters the drains, dilute as much as possible with water and immediately notify the authorities. Spillages, unless dealt with promptly, may set to a glass and become slippery.

7 Storage and Handling:

Do not store solutions at temperatures above 50°C for prolonged periods. Protect from freezing. Normal ventilation is adequate. Wear suitable eye protection when handling.

8 Exposure Controls and Personal Protection:

Exposure Limits (UK EH40/95): Not listed. Sodium hydroxide has an exposure limit of 2mg/m³ (15 min TWA). When using sodium silicate it is recommended that exposure to alkalinity, calculated as NaOH, should be kept below this limit.

Engineering Controls: Local exhaust ventilation if solution is sprayed or forms an airborne aerosol. Otherwise no special controls are necessary.

Personal Protection: Handle in accordance with good industrial hygiene and safety practices.

- Wear suitable overalls.
- Wear enclosed goggles. Eye protection is essential when handling alkaline materials.
- Wear impermeable plastic or rubber gloves.
- No eating, drinking or smoking in the workplace.
- Wash off splashes as soon as possible.
- Keep eye wash bottles close to hand.
- If solution is sprayed wear approved respiratory protective equipment. Advice on respiratory protective equipment is given in British Standards BS 2091 and BS 4275 and the HSE publication HS(G)53.

Our expertise is fitting all the pieces together

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9 Physical and Chemical Properties:

Appearance:	Colourless liquid	Odour:	None
pH:	>11	Viscosity:	20 – 3000 cP at 20°C
Freezing Point:	0°C approx	Boiling Point:	100°C approx
Melting Point:	Not applicable	Flash Point:	Not applicable
Autoflammability:	Not applicable	Explosive Limits:	Not applicable
Vapour Pressure:	Not applicable	Relative Density:	1.2 – 1.6
Solubility (H ₂ O):	Soluble	Partition Coeff:	Not determined
Vapour Density:	Not applicable		

10 Stability and Reactivity:

Stability: Stable.

Materials and Conditions to Avoid: May react with aluminium, zinc, tin and their alloys evolving hydrogen gas. Dilute solutions (<10% solids) have zero to minimal action with these metals. If arc welding is carried out on vessels containing silicate solutions, take care to prevent electrolysis of the solution. Circuits must not be completed through pipes containing valves or flange bolted or threaded joints. May react violently with acids.

Food or dairy residues may contain reducing sugars which under certain conditions may react with alkaline cleaning materials evolving carbon monoxide. Ensure adequate ventilation before entering confined spaces.

Hazardous Decomposition Products: None known.

11 Toxicological Information:

The primary hazard of sodium silicate by all routes of entry into the body is its alkalinity.

Ingestion: The toxicity of sodium silicate is dependant on the silica to alkali weight ratio and on the pH. LD50 oral rat values reported in the literature are in the range 1600-3200 mg/kg.

Inhalation: Unless the solution is sprayed or otherwise becomes airborne as an aerosol, inhalation of silicate solution is unlikely to occur. Irritation of the nose, throat and lungs, due to alkalinity is the likely effect.

Skin Contact: Prolonged contact may cause irritation.

Eye Contact: May cause irritation to eyes.

12 Ecological Information:

Soluble silicates, upon dilution, rapidly depolymerise into molecular species indistinguishable from natural dissolved silica. However the pH of most silicate solutions is above the acceptable limits for direct discharge to sewers or watercourses.

13 Disposal Considerations:

For disposal by landfill sodium silicate is classed as a special waste under the UK Control of Pollution (Special Waste) Regulations. For dilute solutions or in mixtures, Waste Management Paper No 23 published by the Department of the Environment should be consulted. Consult local regulations before disposal.

14 Transport Information:

Pack in steel drums, tanks or tankers. Do not use aluminium. Not classified as dangerous goods under the United Nations Transport Recommendations.

15 Regulatory Information:

Not classified as a dangerous substance under the rules of the EEC "Dangerous Substances Directive" 67/548/EEC as amended by 92/32/EEC.

EINECS Inventory – 2156874

Listed in TOSCA (USA), AICS (Australia), DSL (Canada) under CAS No 1344-09-8.

16 Other Information:

This information is given in good faith, being based on the latest knowledge available to FENDER BCS

No known relevant information provided is designated to enable the user to use the product safely.

The user should not assume on the basis of the information provided in this sheet that the product is suitable for any abnormal use. If the information provided is insufficient to ensure safety in any particular application, contact FENDER BCS for further advice before the proposed application is undertaken.