Boss Surface Finisher

Part Number:	ASF20	**Issue Date:**	17/11/2023
Version Number:	1.1	**Print Date:**	17/11/2023

SECTION 1 - Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product Identifier	Boss Surface Finisher
Synonyms	Not Available
Other means of identification	ASF20

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Concrete surface hardener or densifier.

Details of the manufacturer or supplier of the safety data sheet

Registered Company Name	Allcon Group Pty Ltd
Address	50 Merrindale Drive, CROYDON SOUTH VIC 3136 Australia
Telephone	1300 255 266
Fax	Not Available
Website	allcongroup.com.au
Email	sales@allcongroup.com.au

Emergency Telephone number

Association / Organisation	Poisons Information Centre
Emergency Telephone number	131 126
Other Numbers	000 (Fire, Police, Ambulance)

SECTION 2 - Hazards Identification

Classificiation of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Poisons Schedule	5
Hazard Classification	Skin Corrosion / Irritation - Category 2, Serious Eye Damage - Category 2A, Acute Toxicity (Oral) - Category 4

Label Elements

Hazard pictogram(s)	GHS07 
Signal Word	Warning

Hazard Statement(s)

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation

Precautionary Statement(s) (Prevention)

P264	Wash contacted areas thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement(s) (Response)

P301+P312	IF SWALLOWED: call a POISON CENTER/doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P321	Specific treatment (see First Aid Measures on Safety Data Sheet).
P330	Rinse mouth.
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P337+P313	IF eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing.

Precautionary Statement(s) (Disposal)

P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 - Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	Proportion	Name
1344-09-8	Sodium Silicate	30-60%
Not Available	Other Non Hazardous Ingredients	30-60%

SECTION 4 - First aid measures

Description of first aid measures

Swallowed	Immediately rinse mouth with water. Repeat until product is thoroughly removed. Give water to drink. DO NOT induce vomiting due to risk of further damage. If vomiting occurs give water to drink to further dilute the product. Get medical attention. Contact the Poisons Information Centre (available in each State capital city).
Eye	Immediately rinse with plenty of water for at least 15 minutes. Eyelids to be held open. Urgently get medical assistance. Transport to hospital or medical centre.
Skin	Immediately wash contaminated skin with plenty of water. Soaked clothing should be removed while under the safety shower and skin washed with running water for a minimum of 30 minutes. No attempt should be made to neutralize the alkali with acid solutions, as this could aggravate the burns. Get medical attention if health effects develop or persist
Inhaled	If inhaled and adverse effects occur, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Center or seek medical attention if you feel unwell.

Advice To Doctor	Treat as a corrosive substance. Treat symptoms with supportive care. There is no specific antidote. The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. It may take 48-72 hours to assess the extent of an ocular burn. Probable mucosal damage may contraindicate the use of gastric lavage.
Medical conditions aggraved by exposure	May aggravate pre existing conditions such as:. Eye disorders that decrease tear production or have reduced integrity. Skin disorders that compromise the integrity of the skin such as:psoriasis, rashes, eczema, skin infections. Pulmonary disorders that compromise the integrity of the lungs such as asthma.

SECTION 5 - Fire Fighting Measures

General Measures	Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.
Flammability Conditions	Product is a non-flammable liquid.
Extinguising media	Compatible with dry chemical water spray, regular foam and carbon dioxide extinguising media
Hazardous Products of Combusiton	Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminium, tin, lead, and zinc.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

SECTION 6 - Accidental Release Measures

General Response Procedure	Avoid accidents, clean up immediately. Eliminate all sources of ignition. Increase ventilation. Avoid generating dust. Stop leak if safe to do so. Isolate the danger area. Use clean, non-sparking tools and equipment.Spilled material is very slippery. Only water will evaporate from a spill of this material. Dries to form glass film which can easily cut skin. Sinks and mixes with water. High pH of this material is harmful to aquatic life.
Clean Up Procedure	Small spill cleanup: Mop up and neutralize liquid, then discharge to sewer in accordance with federal, state and local regulations or permits. Large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Stop leak if you can do so without risk. Prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Isolate, dike and store discharged material, if possible. Use sand or earth to contain spilled material.
Containment	Stop leak if safe to do so. Isolate the danger area
Decontamination	If containment is impossible, neutralize contaminated area and flush with large quantities of water.
Environmental Precautionary Measures	Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management
Evaluation Criteria	Evacuate all unnecessary personnel.

Personal Precautionary Measures	Personnel involved in the clean up should wear full protective clothing as listed in section 8.

SECTION 7 - Handling and Storage

Handling	Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Keep container closed. Promptly clean residue from closures with cloth. Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Loading temperature 45-95°C. Use in well ventilated area. Avoid generating and inhaling mists. Avoid skin and eye contact. Avoid inhaling the vapour or mist. Follow normal industrial safety practices. The use of protective clothing and equipment depends on the degree and nature of exposure.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Store away from acids and foodstuffs. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts. Storage temperature 0-95°C. Loading temperature 45-95°C. Do not store in aluminium, fiberglass, copper, brass, zinc or galvanized containers. Mild steel is the most suitable material of construction for drums, tanks, valves, pipe-work, etc. Concrete storage tanks can be used but must be strong enough to hold the weight of Sodium Silicate solution to be stored and thick enough to prevent seepage of water. Mild steel is the most suitable material of construction for drums, tanks, valves, pipework, etc. Concrete storage tanks can be used but must be strong enough to hold the weight of Sodium Silicate solution to be stored and thick enough to prevent seepage of water. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer. Store in clean steel or plastic containers. Do not store in aluminium, fibreglass, copper, brass, zinc or galvanized containers. Mild steel is the most suitable material of construction for drums, tanks, valves, pipe-work, etc. Concrete storage tanks can be used but must be strong enough to hold the weight of Sodium Silicate solution to be stored and thick enough to prevent seepage of water. Mild steel is the most suitable material of construction for drums, tanks, valves, pipe-work, etc. Unsuitable Container Materials: Sodium Silicate solutions are strongly alkaline and are not compatible with aluminium, copper, brass, bronze, zinc, tin and lead. Can etch glass if not promptly removed.

SECTION 8 - Exposure Controls / Personal Protection

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). Sodium Silicate : TWA 5mg/m3 (STEL 5mg/m3) This standard is the manufacturers recommended limit for good practice. All atmospheric contamination should be minimised.
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product

Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the containment at its source, preventing dispersion of it into the general work area. Use in well ventilated area. Avoid generating and inhaling mists.
Individual protection measures such as personal protective equipment	Respirator Eye Gloves Clothing Boots 
Personal Protection Equipment	RESPIRATOR: Respiratory protection is not normally required due to low inhalation risk (AS1715/1716). EYES: Safety glasses, goggles or faceshield as appropriate (AS1336/1337). HANDS: Plastic or Rubber gloves (AS2161). CLOTHING: Overalls, splash apron or similar protective apparel and chemical resistant safety boots (AS3765/2210).
Work Hygenic Practices	Wash contaminated clothing and protective equipment before storing and re-using. The use of barrier cream is recommended.

SECTION 9 - Physical and Chemical Properties

Physical State	Liquid
Appearance	Thick Liquid
Odour	Odourless
Colour	Clear to Hazy, Colourless
pH	Nov-13
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	101-102°C
Melting Point	Approx 0°C
Freezing Point	-1°C
Solubility	Soluble in water
Specific Gravity	1.2-1.7 Typical Range
Flash Point	No Data Available
Auto Ignition Temperature	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	Water boils off at 105-108°C
Density	10.0-13.4lbs/gal
Specific Heat	No Data Available
Molecular weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Vapour Temperature	No Data Available
Viscocity	20-1500 cp (no Data available)
Volatile percent	>50%
VOC Volume	No Data Available
Gas Group	No Data Available
Explosive Properties	No Data Available

SECTION 10 - Stability and Reactivity

Chemical Stability	Stable in sealed containers. Absorbs Carbon Dioxide on exposure to air, which results in the deposition of Insoluble Silica.
Conditions to Avoid	Avoid leaving solutions exposed to carbon dioxide in the air. Prolonged storage above 140 °F (60 °C). Avoid static discharge, shock, or vibration.
Materials to Avoid	Can generate heat when mixed with acids. Avoid prolonged contact with alkali sensitive metals such as: aluminum, brass, bronze, copper, lead, tin, zinc because flammable hydrogen gas can be generated.
Hazardous Decomposition Products	If Overheated: The solution will boil and irritating Sodium Silicate containing mists will be released. Flammable hydrogen gas will form on reaction with aluminium, copper, zinc etc. Gels and generates heat when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas.
Hazardous Polymerisation	Will not occur

SECTION 11 - Toxicological Information

General Information	Acute Oral Toxicity LD50 (rat): 1280 mg/kg (as 100%) The acute oral toxicity of this product has not been tested. When Sodium Silicates were tested on a 100% solids basis, their single dose acute oral LD50 in rats ranged from 1280 mg/kg (above) to 3200 mg/kg. The acute oral lethality resulted from nonspecific causes. These products contain 30-60% Sodium Silicate thus each overall product has an Acute Oral Toxicity LD50 (rat): >2000 mg/kg. Eye Irritation: Severe Irritant. Produced corneal, iridal and conjunctival irritation. Skin Irritation: Irritant. When tested for primary skin irritation potential, this material produced irritation with a primary irritation index of 3 to abraded skin and 0 to intact skin. Human experience confirms that irritation occurs when this material gets on clothes at the collar, cuffs or other areas where abrasion may occur. Subchronic Data: In a study of rats fed Sodium Silicate in drinking water for three months, at 200, 600 and 1800 ppm, changes were reported in the blood chemistry of some animals, but no specific changes to the organs of the animals due to Sodium Silicate administration were observed in any of the dosage groups. Another study reported adverse effects to the kidneys of dogs fed Sodium Silicate in their diet at 2.4g/kg/day for 4 weeks, whereas rats fed the same dosage did not develop any treatment-related effects. Decreased numbers of births and survival to weaning was reported for rats fed Sodium Silicate in their drinking water at 600 and 1200 ppm. Special Studies: Sodium Silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of Sodium Silicates. Frequent ingestion over extended periods of time of gram quantities of silicates is associated with the formation kidney stones and other siliceous urinary calculi in humans. Sodium Silicate is not listed by IARC, NTP or OSHA as a carcinogen. Chronic Health Effects: All Routes:Prolonged or repeated skin contact may cause dry skin. Defatting of the skin can result in irritation and dermatitis (inflammation of the skin). in sealed containers. Absorbs Carbon Dioxide on exposure to air, which results in the deposition of Insoluble Silica.

Eye Irritant	Causes serious eye irritation. Eye exposures may cause burns to the eye lids, conjunctivitis, corneal edema and corneal burn. Eye exposure may cause severe irritation, and pain. The full extent of the injury may not be immediately apparent.
Ingestion	Harmful if swallowed. Gastrointestinal System Effects: Exposure by ingestion may cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.
Inhalation	Respiratory System Effects: Inhalation of this material may cause irritation, redness of upper and lower airways, coughing.
Skin Irritant	Skin Irritation. Skin exposure may cause irritation, redness, itching, swelling, burning sensation. Repeated and prolonged skin contact may cause a dermatitis
Carcinogen Category	No Data Available

SECTION 12 - Ecological Information

Ecotoxicity	The following data is reported for Sodium Silicates on a 100% solids basis: A 96 hour median tolerance for fish (Gambusia affnis) of 2320 ppm; a 96 hour median tolerance for water fleas (Daphnia magna) of 247 ppm; a 96 hour median tolerance for snail eggs (Lymnea) of 632 ppm; and a 96 hour median tolerance for Amphipoda of 160 ppm. These products contain 30-60% Sodium Silicate. High pH of this material is harmful to aquatic life.
Persistence / Degradability	This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica. It does not contribute to BOD.
Mobility	Expected to be mobile in soil. Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica.
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential	This material does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Neither silica nor sodium will appreciably bioconcentrate up the food chain.
Environmental Impact	No data available

SECTION 13 - Disposal Considerations

General Information	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Landfill	Contact a specialist disposal company or the local waste regulator for advice. Normally suitable for disposal at approved land waste site after dilution or neutralisation. Landfill: After dilution or neutralisation may be landfilled. Incineration: Not suitable for incineration.

SECTION 14 - Transport Information

Land Transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air Transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea Transport IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Proper Shipping Name	Sodium Silicate Solution
Group	Not Available

14.7.3. Transport in bulk in accordance with the IGC Code

Proper Shipping Name	Sodium Silicate Solution
Group	Not Available

SECTION 15 - Regulatory Information

General Information	No Data Available
Poisons Schedule	5

National / Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Not Determined
Canada (NDSL)	Not Determined
China (IECSC)	Not Determined
Euorpe (EINECS)	Not Determined
Europe (REACh)	Not Determined
Japan (ECNS/METI)	Not Determined
Korea (KECI)	Not Determined
Malaysia (EHS Register)	Not Determined
New Zealand (NCIoC)	Listed
Phillippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Not Determined

SECTION 16 - Other Information

Revision Date	17/11/2023
Initial Date	17/11/2023

End of SDS