

BOSS SHIELD



SAFETY DATA SHEET

Date of Issue: 21 Feb 2020

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Boss Shield

Other Names: NA

Product Use: Surface protectant on concreting equipment and tools

Supplier / Manufacturer: Allcon Group Pty Ltd
50 Merrindale Drive
CROYDON SOUTH VIC 3136

Emergency Numbers: +61 3 9839 7000 6:30am-5:00pm Mon-Fri
000 Police, Fire and Ambulance
131 126 For poisons advice contact a Poisons Information Centre (New Zealand 0800 764 7660) or a Doctor at once.

2. HAZARDS IDENTIFICATION

Hazardous classification: HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and ADG Code.

Poisons Schedule: S5
Flammable Liquid Category 2, Specific target organ toxicity – single exposure Category 3 (narcotic Effects), Specific target organ toxicity – repeated exposure.

Label Elements: Signal word: DANGER



Hazard Statement(s):
H225 – Highly flammable liquid and vapour.
H336 – May cause drowsiness or dizziness
H373 – May cause damage to organs.
H304 – May be fatal if swallowed and enters airways.
AUH066 – Repeated exposure may cause skin dryness and cracking.

Precautionary Statement(s) Prevention:
P210 – Keep away from heat/sparks/open flames/hot surfaces – No smoking
P260 – Do not breathe dust/fume/gas/mist/vapours/spray.
P271 – Use only outdoors in a well-ventilated area

- P240 – Ground/bond container and receiving equipment
- P241 – Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.
- P242 – Use only non-sparking tools
- P243 – Take precautionary measures against static discharge

Precautionary Statement(s) Response:

- P301+P310 – IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
- P331 – Do NOT induce vomiting
- P370+P378 – In case of fire: Use alcohol resistant foam or normal protein foam for extinction
- P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
- P303+P361+P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary Statement(s) Storage:

- P403+P235 – Store in a well-ventilated place. Keep Cool
- P405 – Store locked up
- P403+P233 – Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statement(s) Disposal:

Dispose of contents/container in accordance with local regulations

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance	CAS#	Proportion %
Naphtha petroleum, light, hydrotreated.	64742-49-0	<60% by weight
Polydimethylsiloxane	63148-62-9	10-30% by weight

4. FIRST AID MEASURES

- Eye contact** If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
 - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids
 - See medical attention without delay; if pain persists or recurs seek medical attention.
 - Removal of contact lenses after an eye injury should only be taken by skilled personnel.
- Skin Contact** If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation

If fumes or combustion products are inhaled:

- remove from contaminated area, lay patient down and keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing. Preferable with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

Ingestion

If swallowed:

- Do NOT induce vomiting
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of sleepiness or with reduced awareness. I.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly as much as casualty can comfortably drink. Seek medical advice.
- Avoid giving milk or oils.
- Avoid giving alcohol
- If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspirations of vomitus.

Medical Advice

For acute or short-term repeated exposures to petroleum distillates or related hydrocarbons:

Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.

Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO₂ 50 mm Hg) should be intubated.

Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.

A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.

Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

Any material aspirated during vomiting may produce lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Fire fighting Foam, Carbon Dioxide or Dry Chemical Powder.

Hazards from Combustion Products: Fire Incompatibility – Avoid contamination with oxidizing agents i.e nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for fire fighters

Firefighting

- Alert fire brigade and tell them location and nature of hazard.
- May be violently or explosively reactive
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or waterways. Consider evacuation (or protect in place)
- Fire fight from a safe distance, with adequate cover.
- If safe, switch off electrical equipment until vapour fire hazard removed.

Fire / Explosion hazard

- High temperature decomposition products include silicon dioxide, small amounts of formaldehyde, formic acid, acetic acid and traces of silicon polymers. These gases may ignite and, depending on circumstances, may cause the resin/polymer to ignite.
- An outer skin of silica may also form. Extinguishing of fire, beneath the skin may be difficult.
- Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat, flame and/or oxidisers.

- Vapour may travel a considerable distance to source of ignition
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include: carbon dioxide (CO₂), silicon dioxide (SiO₂), other pyrolysis products typical of burning organic material **contains low boiling substance:** Closed containers may rupture due to pressure buildup under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Minor Spills:

- Remove all ignition sources
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb all small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container

Major Spills

- Silicone fluids, even in small quantities may present a slip hazard.
- It may be necessary to rope off area and place warning signs around perimeter
- Clean up area from spill, with suitable absorbent, as soon as practically possible.
- Final cleaning may require use of steam, solvents or detergents
- Clear area of personnel and move upwind
- Alert fire brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Consider evacuation (or protect in place)
- No smoking, naked lights or ignition sources.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

- Containers, even those that have been emptied, may contain explosive vapours.
- Do NOT cut, drill grind, weld or perform similar operations on or near containers

Contains low boiling substance:

Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

- Check for bulging containers
- Vent periodically
- Always release caps or seals slowly to ensure slow dissipation of vapours
- Avoid personal contact, including inhalation
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights, heat or ignition sources.
- When handling, DO NOT eat, drink or smoke.

Conditions for safe storage:

- Packing as supplied by manufacturer
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
- Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.
- Where combination packages are used, and the inner packages are of glass, there must be sufficient inert

cushioning material in contact with inner and outer packages

- In addition, where inner packaging's are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close-fitting molded plastic box and the substances are not incompatible with the plastic.

Storage Incompatibility:

- Traces of benzene, a carcinogen, may form when silicones are heated in air above 230°C. Concentrated acids and bases cause degradation of polymer. Boiling water may soften and weaken material
- Avoid reaction with oxidizing agents.

8. PERSONAL PROTECTION / EXPOSURE CONTROL

Protective Equipment:

Personal:	Wear Overalls that cover the legs and arms.
Gloves:	Long Chemical Resistant PVC Gloves.
Eyes:	Safety glasses with side shields or Chemical Goggles.
Respiratory:	Type A-P Filter of sufficient capacity (AS/NZS 1716 & 1715, EN143:2000 & 149:2001, ANSI Z88 or national equivalent).
Other:	Practice strict hygiene – wash hands before breaks and after finishing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, highly flammable liquid with a solvent odour; does not mix in water		
Physical State:	Liquid	Relative Density:	0.7
Odour	Not Available	Partition Coefficient:	Not Available
Odour Threshold:	Not Available	Auto Ignition Temp:	Not Available
pH (as supplied):	Not Available	Decomposition Temp:	Not Available
Melting/Freezing Point:	Not Available	Viscosity:	Not Available
Initial Boiling Point:	<80°C	Molecular weight:	Not Applicable
Flash Point:	35°C	Taste:	Not Available
Evaporation Rate:	Not Available	Explosive Properties:	Not Available
Flammability:	Flammable	Oxidising Properties:	Not Available
Upper Explosive Limit:	6%	Surface Tension:	Not Available
Lower Explosive Limit:	1%	pH as a solution:	Not Applicable
Volatile Component:	80% Volume	VOC g/l:	Not Available
Gas group:	Not Available		
Vapour Pressure:	Not Applicable		
Solubility in water:	Immiscible		
Vapour density:	Not Available		

10. STABILITY AND REACTIVITY

Reactivity:	See Section 7
Chemical Stability:	Silicone fluids are stable under normal storage conditions. Hazardous polymerisation will not occur. At temperatures > 150 C, silicones can slowly react with the oxygen in air. When heated > 300 C, silicones can slowly depolymerise to volatile siloxanes whether or not air is present. Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur
Possibility of Hazardous Reactions:	See Section 7
Conditions to Avoid:	See Section 7
Incompatible Materials:	See Section 7
Hazardous Decomposition products:	See Section 5

11. TOXOLOGICAL INFORMATION

Inhaled:

- Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of coordination, and vertigo.
- Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.
- Inhalation hazard is increased at higher temperatures.
- Vapours of silicones are generally fairly well tolerated, however very high concentrations can cause death within minutes due to respiratory failure.
- At high temperatures, the fumes and oxidation products can be irritating and toxic and can cause depression leading to death in very high doses.
- Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination.
- Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.

- Nerve damage can be caused by some non-ring hydrocarbons. Symptoms are temporary, and include weakness, tremors, increased saliva, some convulsions, excessive tears with discolouration and incoordination lasting up to 24 hours.
- Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure

Ingestion:

- Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) Accidental ingestion of the material may be damaging to the health of the individual.
- Silicone fluids do not have a high acute toxicity. They may have a laxative effect and produce central nervous system depression.
- Isoparaffinic hydrocarbons cause temporary lethargy, weakness, incoordination and diarrhoea

Skin Contact:

- The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives .
- Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
- Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
- Low molecular weight silicone fluids may exhibit solvent action and may produce skin irritation.
- Skin exposure to isoparaffins may produce slight to moderate irritation in animals and humans. Rare sensitisation reactions in humans have occurred. Open cuts, abraded or irritated skin should not be exposed to this material
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected

Eye:

- Eye exposure to silicone fluids causes temporary irritation of the conjunctiva. Injection into the specific structures of the eye, however, causes corneal scarring, permanent eye damage, allergic reactions and cataract, and may lead to blindness. Instillation of isoparaffins into rabbit eyes produces only slight irritation. Limited evidence or practical experience suggests that the material may cause eye irritation in a substantial number of individuals.
- Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).

Chronic:

- Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 - This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.
 - Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.
 - There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.
 - Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
 - Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.
 - Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]
 - Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin.
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12. ECOLOGICAL INFORMATION

Harmful to aquatic organisms.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the oxygen transfer between the air and the water Oils of any kind can cause:

- drowning of water-fowl due to lack of buoyancy,
- loss of insulating capacity of feathers,
- starvation and vulnerability to predators due to lack of mobility
- lethal effects on fish by coating gill surfaces, preventing respiration
- asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation. For Siloxanes:

- Environmental Fate: Siloxanes are used in cosmetics, wax, polishes, and to a minor extent in several other applications.

- Atmospheric Fate: In the presence of nitrate ions, short chain siloxanes are broken down by sunlight to the level of silicate within days. The main source atmospheric siloxane release to the air is via evaporation.
- Aquatic Fate: It is well accepted that polydimethylsiloxane fluids become permanent residents of sediment but should not have adverse environmental effects. Silicone fluids are very surface active on surface waters. These substances tend to move into the aquatic compartment attached to textiles, sewage sludge, hair, algae, sediment, etc. Nonevaporating silicone fluids used in cosmetics, wax, polishes, cleaning products and those used in textile applications, (softeners), will, to a large extent, end up in wastewater and be directed to wastewater treatment plants.
- Ecotoxicity: Siloxanes are chemically stable which makes them very persistent in the environment, where they are expected to remain for many years.

For High Benzene Naphthas, (HBNs):

- Environmental Fate: Some of these substances occur in crude oil and are formed as by-products from the combustion of natural materials, (e.g. during forest fires).
- Atmospheric Fate: The chemical components in HBNs and are expected to evaporate significantly to the air where they are subject to rapid physical degradation through hydroxyl radical attack.
- Terrestrial Fate: These substances would only be found in soils where localized spills of petroleum products have occurred and during production of products containing these substances. HBNs have the potential to exhibit a high extent of biodegradability. Upon release to soil, some of these substances are expected to sink through the soil to groundwater. Many of these substances have a low to moderate tendency to sorb to soil particles. Sorption potential also varies with changes in other soil properties, (e.g. number of available adsorption sites, porosity and water content), and environmental conditions.

DO NOT discharge into sewer or waterways.

13. DISPOSAL CONSIDERATIONS

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.

Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning or process equipment to enter drains.

- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Dispose of by:

- burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

14. TRANSPORT INFORMATION

Labels Required:



Marine Polutant:	No
Hazchem:	3YE
UN Number:	1993
Packing Group:	II
UN Proper shipping name:	FLAMMABLE LIQUID N.O.S. (contains naphtha petroleum, light, hydrotreated)
Environmental Hazard:	Not Applicable
Transport Hazard Class(es):	Class 3 <u>Sub-risk</u> – Not Applicable
Special precautions for user:	<u>Special Provisions</u> – 274 <u>Limited quantity</u> – 1L

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

NAPHTHA PETROLEUM, LIGHT, HYDROTREATED(64742-49-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS:

- Australia Hazardous Substances Information System – Consolidated Lists
- Australia Inventory of Chemical Substances (AICS)

POLYDIMETHYSILOXANE(63148-62-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

- Australia Inventory of Chemical Substances (AICS)

16.OTHER INFORMATION

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

END OF SDS