

Product Data Sheet

Duram S900

Clear, Non-Glossy, Penetrative Sealer and Waterproofing Liquid

Description

Duram S900 is a clear, high pH, deep penetrating siloxane waterproofing solution. Duram S900 penetrates in to the tissue of porous substrates and creates a waterproofing barrier below the surfac preventing the ingress of water. Duram S900 is an effective waterproofing solution and stops leaks without lifting tiles or changing the overall appearance of the surface. Duram S900 also solves the problems associated with water penetration such as corrosion of steel reinforcement, friability and binder loss of surfaces, fungal and bacteria attack and degradation due to carbon dioxide permeability. Duram S900 is capable of withstanding high pH conditions such as found in new concrete and lime based mortars and bricks. Duram S900 still allows the diffusion of vapours or 'breathing' ability of the substrate.

Uses

The properties of Duram S900 make it ideal for the following uses:

- Waterproofing external concrete, cement, cement render, face brick, block walls, sandstone, porous pavers and other porous surfaces.
- Prevention or minimisation of of efflorescence and lataince (white salt spotting or leaching).
- Protection of sandstone.
- General rain water barrier.
- Assists in preventing mould and fungus growth.

CAUTION: Sealed surfaces may be slippery when wet.

Suitable Surfaces

Duram S900 has been used sucessfully on the following porous substrates when used correctly.

- Concrete, cement, cement render, block work, face bricks, porous pavers, grout (tiled areas), sand and cement tile beds, sandstone, terracotta pavers and other porous surfaces.
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Specification

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement but the applicator or contractor must use their skill, knowledge and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the Company in writing.

Limitations

- » Duram S900 penetrates in to the tissue of the substrates and accordingly relies its soundness and stability.
- » Duram S900 will not bridge or seal cracks.
- » In order for Duram S900 to work effectively, sufficient product must be absorbed in to the surface to fill the voids within the substrate. Highly porous, sandy and friable surface may not contain sufficient density to allow the Duram S900 to create an adequate 'build-up' of S900 to form waterproofing barrier. Test area are highly recommended.
- » The quantity of S900 needed for a given area is subject to its density, porosity, thickness, soundness and condition which may not be apparent.

Benefits and Advantages

- Forms a waterproofing barrier without changing the overall appearance of the surface.
- Seals tile beds without lifting tiles.
- Highly economic solution.
- Long lasting protection.
- Quick drying .

- Dries clear in a flat (low gloss) finish.
- It can be re - coated.
- Using S900 is a very viable and economical first effort attempt to stop leaks.
- Provides excellent weatherproof barrier to rain and salt spray.

Precautions in Use

When applying Duram S900 it is strongly recommended that all safety precautions are followed as per product label and data sheet. As the product contains solvent ensure that all sources of ignition are kept away. Ensure area is well ventilated. Adequate masks should be worn when spraying. Protect surrounds against overspray. Observe all precautions on the Material Safety Data Sheet. In exposed areas, do not apply if rain is imminent and protect coating from rain and inclement weather until fully cured. As a precaution, we suggest that , at least initially, the surface may be slippery if wet.

Priming and Surface Preparation

Good preparation is essential. Surfaces must be sound, stable, dry, clean and free of dust, loose, flaking, friable material and substances that may diminish adhesion.

All surfaces must be clean, dry, of sound construction, stable and free of any dust, dirt, grease, oil, curing compounds or contaminants that might interfere with adhesion.

Cracks must be repaired. If mortar is suitable then use a non-shrink mortar. If flexibility is required to repair the crack, this should be done after the application of Duram S900 as the solvent may pit or slightly dissolve the sealant.

Loose grout must be removed and then replaced with sound grouting and allowed to dry.

Ensure surfaces are clean, free of other coatings such as paints and sealers and the substrate is dry.

Efflorescence and laticin should be removed by wire brush and then washed and allowed to dry.

Test areas are important as, although rare, latent salts or other chemicals may cause some discolouration.

Application

Duram S900 can be applied by brush, roller, spray or poured.

It is essential that the substrate be well saturated, i.e. wet soaked.

For best result, apply a soaking coat of S900 and allow product to be absorbed. Immediately thereafter, while still wet, apply a second soaking application and allow the product to be absorbed. This process can be repeated several times to ensure that sufficient product has been absorbed. The product should be, in the first instance, applied wet on wet. Then allow the product to dry for 24 hours and apply a final soaking coat.

Coverage

The stated average coverage rate may vary depending upon type, condition, porosity, texture of the surface and application technique.

As a general guide the coverage rate for Duram S900 is:

- Ceramic tiled areas: 6m² per litre - concentrated on the grout lines.
- Terracotta tiled areas: 3m² per litre per coat.
- Face brick: 4m² per litre per coat.
- Highly porous areas: 2 to 3m² per litre per coat.

Our recommendation is to err on the use of additional material as the initial absorption, wet on wet, is very important. Once cured, the absorption of additional material is greatly reduced.

Colours

Duram S900 is a clear product and dries to a low gloss.

Drying and Curing

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide.

At 25°C and 50% RH (per coat)

- Touch dry: 2 to 4 hours

- Set: 4 to 6 hours
 - Full cure: 12 to 24 hours.
- Service Temperature: 0°C to 50°C
Application Temperature: 5°C to 30°C

Storage

Duram S900 should be stored in a cool, dry place . Keep all sources of ignition away from the product. Store in well sealed metal containers. Shelf life is up to 12 months in unopened or undamaged containers. Available in 4 litre and 15 litre pails.

Clean Up

All tools and equipment should be cleaned in Duram Solvent as soon after completion as practical.

Tiling, Topping or Top Coating

Not recommended as product is usually left exposed. If area is to be tiled or topped, then we would recommend the use of Duram's conventional waterproofing membranes.

Safety & Precautions

Sealed surfaces may be slippery when wet. The use of Solvent resistant gloves, mask and eye protection is recommended. Observe the safety precautions on the product data sheet and material safety data sheet. It is a class 3 dangerous goods must be declared prior to the transportation of the product. Product is flammable. Keep all ignition sources away.

Conditions of Use and Disclaimer

The information contained in this data sheet is given in good faith based upon our knowledge and current information and does not imply warranty. The information is provided and the product sold on the basis that the product is used for its intended use and applied in a proper workman like manner in accordance with the instruction in this data sheet onto suitable and correctly prepared surfaces which shall remain sound, stable, free of structural defects, cracking, spalling concrete cancer, negative pressure, movement or other conditions that may effect the performance of the product. Deviations from application instructions may diminish or negate the performance of the product. Under no circumstances will the Company be liable for any loss, consequential or otherwise, arising from the use of the product. Liability is limited to the replacement of proven faulty product.

Classified as hazardous according to the criteria of Worksafe Australia.

Identification	Physical Description	Ingredients									
Product Name: Duram S900 Other Names: Duram S900. High pH Siloxane Impregnant. U.N. Number: 1300 Class: III Hazchem 3[Y] Code: Poison 5 Schedule: Pack Sizes: 4ltr & 20ltr pails.	Appearance: Clear Liquid. Boiling Point: (oC): N/A Vapour (mm of Hg at Pressure: 25oC) Percent 95% Volatiles: Specific Gravity: 0.779. Flash Point: (oC): Closed cup: 38; Open cup N/A. Flammability: 1.1 L.E.L., 6.0 U.E.L. Water Solubility: Insoluable.	<table border="1"> <thead> <tr> <th>Chemical</th> <th>CAS No.</th> <th>Proportion</th> </tr> </thead> <tbody> <tr> <td>Stoddard Solvent.</td> <td>8052-41-3</td> <td>H>60%</td> </tr> <tr> <td>Chemical Entity.</td> <td>N/A</td> <td>L<10%</td> </tr> </tbody> </table>	Chemical	CAS No.	Proportion	Stoddard Solvent.	8052-41-3	H>60%	Chemical Entity.	N/A	L<10%
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Uses:

Duram S900 is suitable for waterproofing external concrete, render, brick, block walls & fibrous board. It is used for the Prevention of efflorescence (white salt spotting).

Health Warning Information

Health Effects

Swallowed: Moderately toxic, can cause vomiting, diarrhea and drowsiness. Aspiration of vomited material can be very hazardous, can cause pneumonia.

Eyes: Avoid eye contact. Mild to moderate irritation.

Skin: Irritant, prolonged or repeated contact may cause dermatitis.

Inhaled: Low toxicity; may cause headache and nausea.

First Aid

Swallowed: Do not induce vomiting. Give plenty of water to drink and seek immediate medical attention. If aspiration of vomited material occurs, seek immediate medical aid.

Eyes: Immediately flush eyes with copious amounts of water. If Irritation persists seek medical aid.

Skin: Remove contaminated clothing, wash with soap and water.

Inhaled: Remove person to fresh air, keep warm and rest victim. If unconscious administer oxygen, if breathing stops, administer artificial respiration.
Seek immediate medical attention.

Advice to Doctor

Treat Symptomatically.

Precautions in Use

Product is flammable and should be applied in well ventilated areas. Ensure all ignition sources are removed prior to the application of S900.

The wearing of protective clothing, goggles and gloves is highly recommended.

Exposure Limits

Exposure limits: TLV-TWA: 150 ppm.

Ventilation

Ensure adequate ventilation.

Personal Protection

The use of rubber gloves, safety boots and goggles (against splashes) is recommended.

Safe Handling Information

Storage and Transport

Store at <30oC away from sources of ignition and oxidizing materials.

Suitable containers: Plain metal pails as recommended by manufacturer.

Check containers are labeled and not damaged.

Spills and Disposal

Spills: Eliminate all sources of ignition. For spills > 100L, call fire brigade immediately. Otherwise contain all spills and absorb using straw, sawdust, sand, etc.

Disposal: Dispose of material at a site approved by local authorities. Waste may be disposed of by controlled combustion, consult local authorities.

Fire / Explosion Hazard

Flammability Class: B. extinguishing Agents: CO₂, dry chemical foam, BCF. Dangerous decomposition products: Carbon monoxide and dioxide.

Reactivity Hazards: May react with oxidizing materials.