

Description

WP SDW 1 is a chemically modified silicate densifier and waterproofing solution designed to penetrate concrete substrates. It reacts with free lime (calcium hydroxide) and moisture to form an insoluble calcium silicate hydrate (CSH) gel within pores, capillaries, and micro-cracks, permanently densifying the concrete matrix. By densifying the concrete, the gel creates a sub-surface barrier against the ingress of water and contaminants such as chloride ions.

Benefits

- Water-based, non-toxic, VOC-free
- Long-term performance with no requirement for reapplication under normal service conditions
- Fully trafficable once cured
- Allows easy identification and remediation of persistent leaks or cracks without the need to remove membranes
- Capable of sealing non-moving shrinkage cracks up to 2.0 mm, subject to substrate condition
- Reduction of chloride diffusion coefficient by up to 89%
- Water permeability reduced by up to 70%
- Can increase surface hardness to approximately 6–8 on the Mohs scale
- Allows >80% moisture vapour permeability

General Application

- Rooftops & Podium Decks
- Car-Parks
- Road & Rail Bridge Decks
- Wharf Decks & Marine Structures
- Airport Runways, Taxiways, Aprons

Application Guidelines

WP SDW 1 should be applied at a coverage rate of approximately 1–4 m² per kg, depending on the porosity and condition of the substrate. The concrete surface must be clean, sound, and free of dust, laitance, curing compounds, sealers, or any materials that may inhibit penetration.

Where segregation or voids are apparent, chip out, treat with Galaxie SDW, then make good with Galaxie SBR repair mortar. Good concrete practice must be followed such as adequate curing, compaction and vibration.

Application

By a low-pressure sprayer, roller or squeegee at the recommended application rate. After 1–6 hours, highly porous areas may require a second or third coat. A trial should be undertaken first to ascertain the ideal application rate. Treated surfaces should be protected from rain, standing water, or rapid drying for a minimum of 12–24 hours after application.

Note all excess should be removed so there is no ponding.



Technical Data

WP SDW 1	
Appearance	Colourless liquid
Solids Content	15-20%
Density	1.15
Flash point	N/A water based
Boiling Point	101°C

All technical data stated herein is based on tests carried out under laboratory conditions at 25°C

Limitations

Not suitable for application to non-cementitious substrates, painted surfaces, or surfaces subject to active structural movement.

Packaging

WP SDW 1 is supplied in 5 kg and 20kg drums. Packaging size may vary subject to local regulations and requirements.

Storage

WP SDW 1 should be stored at room temperature (min 10°C and max 35°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of 1 year can be expected.

Health & Safety

WP SDW 1 should only be used as directed. We always recommend that the Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. Please contact Galaxie or your local representative for the current SDS.

