

Description

Galaxie WP Concentrate is a surface-applied crystalline waterproofing treatment for concrete. Supplied as a dry powder consisting of Portland cement, specially treated quartz sand and a proprietary blend of active chemicals, it is mixed with water on site and applied directly to prepared concrete surfaces. No primer or separate bonding agent is required.

Once applied, the active chemicals react with free lime and moisture in the concrete capillary system to form insoluble crystalline complexes. These crystals progressively block capillaries and minor shrinkage cracks, preventing water ingress even under sustained hydrostatic pressure. The treatment remains breathable water vapour can still pass through the structure. Crystal growth continues as long as moisture and free lime are present, giving Galaxie WP Concentrate ongoing self-sealing capability throughout the life of the concrete.

In addition to waterproofing, WP Concentrate protects concrete against seawater, wastewater, aggressive groundwater and certain chemical solutions. It is potable water approved and is suitable for water storage tanks and reservoirs.

Benefits

- Integral crystalline waterproofing that becomes part of the concrete matrix
- Withstands water pressure exceeding 12 bar at 28 days
- Self-sealing crystal growth continues in the presence of moisture and free lime
- Breathable allows water vapour transmission while blocking liquid water
- Potable water approved suitable for drinking water tanks and reservoirs
- Protects against seawater, wastewater, aggressive groundwater and chemical solutions
- Non-combustible tested to BS 476-4
- Can be applied as a slurry coat or dry-shake to freshly placed concrete slabs
- Suitable for brush, roller or spray application

General Application

- Basement retaining walls
- Concrete slabs — floor, roof and balcony
- Construction joints
- Water-retaining structures
- Swimming pools
- Sewage treatment plants and channels
- Potable water tanks and reservoirs
- Blinding concrete and construction joint treatment

Technical Data

Galaxie WP Concentrate	
Potable water approved	Yes
Withstand water pressure @ 28 days	>12 bar
Colour	Cement grey
Bulk Density (kg/L)	1.25
Initial Setting Time @ 20°C	60 minutes
Tensile Adhesion (BS EN 1015-12)	0.70 MPa
Water Permeability (BTD/TP/02/2002)	8.50×10^{-13}
Water Penetration (DIN 1048: Part 5: 1991)	<10 mm
Fire Testing (BS 476-4)	Non-combustible

Application Guidelines

Surface Preparation

Concrete must be clean with an open capillary system. Remove laitance, dirt, grease and all surface contaminants by high-pressure water jetting, wet sandblasting or wire brushing. Faulty concrete including cracks and honeycombing must be chased out, coated with WP Concentrate and filled flush with a suitable repair mortar. Dampen the surface thoroughly with clean water prior to application no free-standing water. **WP Concentrate is not a decorative material.**

Mixing

Pour water into a clean mixing vessel then gradually add the WP Concentrate powder while mixing with a low-speed paddle mixer until a consistency of thick oil paint is obtained. Mixing ratio is 5 parts WP Concentrate to 2 parts water by volume (approximately 7–8 litres per 20 kg bag for slurry application). Mix only the quantity that can be applied within 20 minutes. Stir frequently during use. If the mix begins to set, re-stir to restore workability — do not add additional water.

Application

Slurry coat Apply one or two coats by masonry brush or power spray. Where two coats are specified apply the second coat while the first coat is still green.

Dry-shake (horizontal surfaces only) Distribute WP Concentrate in powder form through a sieve and trowel into freshly placed concrete once it has reached initial set (approximately 10 mm footprint imprint when walked on).

Post-treatment curing Once WP Concentrate has reached initial set, moist-cure with a fine fog spray of water 2–3 times per day for three days. In hot or windy conditions cure more frequently. Protect from rainfall, frost and water puddles during the curing period.



Coverage Rates

Substrate / Situation	Rate (kg/m ²)
Surfaces to be backfilled — 1st coat	0.75
Surfaces to be backfilled — 2nd coat	1.00
Water-retaining structures — internal walls (2 coats each)	0.75
Hardened concrete slabs — slurry coat	1.00
Fresh concrete slabs — dry-shake trowel	1.00
Construction joints — slurry prior to next lift	1.50
Blinding concrete — prior to overlay slab	1.20

Limitations

- Do not apply at substrate or air temperatures below +5°C
- Cannot be used as an additive to concrete or plaster
- Not a decorative finish — must be protected or covered where exposed
- Do not add water to restore a mix that has begun to set — re-stir only
- Protect fresh coating from rainfall, frost and standing water during the 3-day curing period

Packaging

Galaxie WP Concentrate is supplied in 5 kg and 20 kg pails and 20 kg bags. Packaging size may vary subject to local regulations and requirements. Contact your local representative for alternative pack sizes.

Storage

Store between 10°C and 38°C in dry conditions out of direct sunlight. Shelf life is six months in unopened original packaging

Health & Safety

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

