

ARMACRETE P150



DESCRIPTION

ARMACRETE P150 is a proprietary blend of silica (Si) polymers which penetrate concrete surfaces providing an increase in abrasion resistance and a reduction in the surface absorption of liquids.

The Potassium silicates and silicate compounds present in **ARMACRETE P150** each play a unique role in densifying and sealing concrete.

The Potassium Silicates in **ARMACRETE P150** penetrate deep within the matrix and chemically reacts with calcium hydroxide (also known as portlandite) in the surface to produce calcium silicate hydrate (CSH) – the primary strength-providing portion of concrete paste.

Portlandite is a soft, porous mineral that is subject to carbonation and chemical attack, so replacing it with the much stronger CSH is a major benefit of **ARMACRETE P150**.

The silicate in **ARMADILLO P150** also reacts with the concrete to form a hydrophobic polymer within the pores and on the concrete surface.

The ultimate result is a concrete floor that is exceptionally dense and liquid-repellent, which equals long-lasting protection and durability.

ARMACRETE P150 is water based. It generally dries tack free in 2 to 4 hours at 21C @ 50% RH.

PRIMARY APPLICATIONS

- Interior or exterior
- Warehouse floors
- Commercial floors
- Manufacturing plants
- Residential garages and basements
- Distribution centers

ADVANTAGES OF USE

- Reduces porosity and increases hardness of the concrete surface
- Combines with the concrete becoming part of the matrix and lasts the lifetime of the substrate.
- VOC Compliance with GREEN STAR- OFFICE DESIGN V3 IEQ-13
- Resists penetration of oil and many chemicals
- Reduces the ingress of carbon dioxide and resulting carbonation (degradation of the substrate)
- Minimizes tyre marks and enables them to be more easily removed
- Equipment can be cleaned with water
- Can be applied to fresh, new, or existing concrete
- Low sheen enhances the appearance of concrete surface
- Will not blush
- Buffable
- Compatible with bond breakers for tilt-up projects.

TECHNICAL INFORMATION

Typical Performance

Drying Time:

Light Foot Traffic.....4-6 hours

Wheel Traffic.....24 hours

Shelf Life: 2 years in original, unopened package.

APPEARANCE

ARMACRETE P150 is a clear liquid which dries transparent.

After placing, the color of the concrete may initially appear darker than the surrounding concrete.



ARMACRETE P150



As the sealer cures and dries out, the treated concrete will gradually increase in tightness with a subsequent increase in gloss.

If additional immediate gloss is desired, the floor may be dry buffed with a buffing pad after the sealer has cured for 24 hours.

COVERAGE

One litre of **ARMACRETE P150** will cover 4-5 m² /litre) of steel troweled surface depending on the porosity of that surface.

When **ARMACRETE P150** is used as final treatment on a metallic or mineral aggregate hardened surface, the coverage may be greater than indicated above.

For other concrete floors coverage is still dependent upon the final surface texture.

NEW CONCRETE

Surface Preparation- Cure the concrete using Surface Cure, a curing compound complying with AS3799.

For fast-track projects, new concrete should cure seven (7) days minimum and adherence to Surface Cure R data sheet for removal.

No residue of Surface Cure R should be present as its presence will reduce the effectiveness of the treatment.

Allow concrete to air dry a minimum of 24 hours prior to application of **ARMACRETE P150**.

Insufficient drying of the concrete will prevent full penetration of **ARMACRETE P150**, reducing its effectiveness.

EXISTING CONCRETE

Surface Preparation-The concrete surface must be clean, dry, and free of any contaminant or coating.

APPLICATION:

Apply **ARMACRETE P150** at the suggested rate (5m²/L) by broom or low-pressure sprayer.

Keep the entire surface of the concrete wet with **ARMACRETE P150** for a minimum of 30 minutes.

The material may be broomed around on the surface to ensure good coverage.

As the **ARMACRETE P150** begins to thicken and gel (but no more than 60 minutes after initial application) broom and squeegee the excess material on to the adjacent floor area next to be treated. If necessary, lightly sprinkle water on the surface to aid in removal.

Continue until the entire floor has been treated. Vacuum or squeegee to remove any excess material.

When the owner is ready to take occupancy of the building, but before equipment is placed on the floor, an additional application of **ARMACRETE P150** may be applied to increase the chemical and wear resistance of the concrete surface.

Soft-Cut Saw Joints-If the floor joints will be cut using the Soft-Cut saw method, treat the floor surface with **ARMACRETE P150** (including flooding the joints) after the saw cutting operation.

The applicator should be sure the excess cement dust remaining after saw cutting has been removed from the concrete surface prior to application of **ARMACRETE P150**.

After the slab has cured the appropriate number of days, the joints may then be cleaned a final time and the joint filler applied.



Headquarters

9 Production Avenue, Molendinar

Queensland, 4214 Australia

Ph: +61 7 5594 0344

www.chemicalhouse.com.au



ARMACRETE P150



CLEAN-UP

Clean brooms, tools and all equipment and sprayers with potable water immediately after use.

The residue from application and clean-up process is non-toxic.

LIMITATIONS

Allow the product to dry a minimum of 4-6 hours before exposure to traffic.

Protect **ARMACRETE P150** from freezing. In the event of freezing, thaw and stir or agitate before using.

Do not leave any **ARMACRETE P150** residue on the treated concrete surface.

Excess hardened material must be removed with a grinder.

ARMACRETE P150 is not recommended for use as a curing compound.

It does not meet the requirements of ASTM C-309, ASTM C-1315 or AS3799.

Protect metals, glass, wood, paint, or brick from contact with **ARMACRETE P150**.

If accidentally over sprayed, wash surface with potable water IMMEDIATELY.

FIRST AID, SAFETY & STORAGE

Refer to Material Safety Data sheet.

PACKS

5L, 20L, 200L, 1000L

ARMACRETE P150 - PDS AUG 2024

This Product Data Sheet (PDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this PDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Chemical House does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether in accordance with any advice, specification, recommendation, or information given by it.



Headquarters

9 Production Avenue, Molendinar

Queensland, 4214 Australia

Ph: +61 7 5594 0344

www.chemicalhouse.com.au