



Delivering Concrete Solutions

DATA SHEET

Hycrete W500

For technical assistance contact your local Hycrete Representative or call (201) 386-8110

For Waterproof Concrete in Non-Air Concrete Mixes



Control Crystalline Hycrete

* KEY BENEFITS

- Hycrete W500 keeps water out of concrete
- 50% or more reduction in water absorption
- Neutral concrete set time performance, even in high fly ash and GGBS (slag) mixes
- Resists hydrostatic pressure
- Can heal cracks up to 0.4mm
- Consistent performance and verifiable dosage
- Easy to use; no additional labor required
- Safe to use; does not contain carcinogenic silicas
- Corrosion protection; protective coating formed around steel reinforcement

*See page 2 for testing methodologies

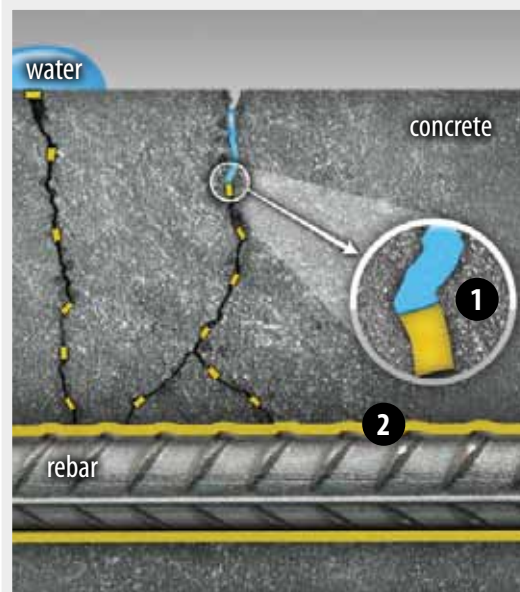
PRODUCT DESCRIPTION

Hycrete W500 is a patented concrete waterproofing admixture that significantly reduces water ingress through concrete. Ordinary concrete absorbs water and dissolved salts through its network of pores, leading to water infiltration and corrosion of steel reinforcement. Hycrete W500 reduces absorption and forms a protective coating around steel reinforcement. Less water and fewer chlorides are able to penetrate the concrete and the reinforcement has enhanced protection from corrosion.

Hycrete W500 delivers consistent and reliable performance and is easy to use. Hycrete W500 is an environmentally-responsible, Cradle to Cradle™ certified product. Using Hycrete W500 allows owners and builders to have the comfort of knowing their investment/project remains secure against one of nature's most damaging elements ... water.

PRODUCT FEATURES

- Cradle to Cradle™ certified by MBDC
- ANSI 61 - approved for use in potable water tanks
- Compatible with standard admixture metering equipment
- ISO 14021 compliant - recycled content in accordance with Type II environmental labeling; applicable for LEED Materials and Resources Credit 4.1/4.2 - Recycled Content



1. Hydrophobic pore blocking
2. Corrosion-inhibiting surface coating

USES AND APPLICATIONS

- Above and below grade construction
- Water containment reservoirs
- Sewage and water treatment plants
- Secondary containment structures
- Underground vaults
- Extra protection for walls and slabs
- Tilt-up panel walls
- Pre-cast components
- Architectural water features and fountains
- Bridges, dams and highway infrastructure
- Aquatic centers, marinas, and zoos
- Swimming pools

PRODUCT PERFORMANCE*

Water absorption	BSI 1881-122	50% reduction compared to control
Permeability/hydrostatic pressure	DIN 1048 BS EN 12390-8	Passes DIN 1048; up to 70% reduction in permeability
Crack healing	ASTM C597	Concrete with Hycrete fosters faster and 100% complete healing compared to untreated control
Set time	ASTM C403	Set neutral
Drying shrinkage	ASTM C157	Neutral to the control
Slump	ASTM C143	Neutral
Workability	N/A	Excellent
Effect on concrete color	N/A	None
Compressive strength	ASTM C39	Water/cement ratios may need to be lowered to account for possible, minor strength decreases associated with some materials. Perform trial mixes.
Potable water	ANSI 61	Approved for use in potable water tanks greater than 200,000 gallons
Adhesion	ASTM C1583, ASTM C1072, ASTM D3359	Neutral; no adverse effect on bond with concrete

**All benefits and results are based on actual test results. Results may vary according to concrete mix designs, Hycrete W500 dosage, or other factors.*

GENERAL PROPERTIES AND CHARACTERISTICS

Physical characteristics: Form Liquid Specific gravity 1.05 Chloride content Nil pH: 8.5	Compatibility: ■ Most concrete admixtures ■ Most Portland cements or replacements including fly ash and GGBS (slag) ■ Shotcrete mixes and application ■ Most surface-applied sealants and external membrane protection systems
Recommended dosage: 1.0 U.S. gallon per cubic yard of concrete (5.0 liters per cubic meter)	
Packaging: 1 gallon bottles; 5 gallon pails; 55 gallon drums; 275 gallon totes; bulk tanker delivery	
Storage and handling: Store above 32°F (0°C) and below 120 °F (48 °C). Slight flocculation can occur over time due to pH reductions. Such flocculation does not affect product performance	

NOTES

- For air-entrained concrete mixes see Hycrete W502 data sheet. Hycrete W502 is specifically designed for air-entrained concrete mixes.
- User should perform trial mixes prior to placement and make necessary adjustments to the mix design as needed.
- If considering dosages other than recommended dosage, contact Technical Services before use.

SAFETY

Hycrete W500 is a water-based material and should not be swallowed or come into contact with skin or eyes. Wear suitable protective gloves and goggles. If material comes in contact with the skin, wash immediately with soap and water. In case of contact with eyes, rinse immediately with sufficient water and seek medical support. If swallowed, seek immediate medical attention. For further information please consult the Material Safety Data Sheet.

RELATED DOCUMENTS

- Hycrete Mixing Instructions
- Hycrete Material Safety Data Sheet – Hycrete W500
- For air-entrained concrete mixes see Hycrete Data Sheet - Hycrete W502



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Hycrete warrants that its products are free from manufacturing defects and, when applied in accordance with the current specification and application instructions, will perform as so stated in its product literature. Waterproofing performance of the Hycrete W500 is warranted for 25 years. Hycrete will provide sufficient material to waterproof areas shown to be defective due to Hycrete admixture material deficiencies.

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