

Water Based Acrylic

FORMERLY FLEXCRETE MONODEX ULTRA

PRODUCT DESCRIPTION

Intercrete 4890 is a single pack, low VOC, water-based, modified styrene acrylic copolymer decorative coating that provides excellent protection to concrete and masonry substrates against carbonation and water ingress without entrapping moisture within damp substrates.

Elastomeric properties enable the system to accommodate hairline cracks and substrate movement while providing lasting protection. Adhesion is excellent to mineral substrates.

INTENDED USES

As an anti-carbonation coating to prevent the ingress of carbon dioxide and water and thereby protect steel reinforcement in concrete from corrosion. Designed to be applied in two coats as a low sheen finish for the protection of concrete substrates in a range of environments. Vapour permeable in nature, it enables damp substrates to breathe and dry out without causing blistering in the coating. In addition to this, it has been formulated to inhibit the growth of mould, mildew and lichens.

CE-marked in accordance with BS EN 1504-2. Suitable for surface protection systems principles 1.3, 2.2, 8.2 as defined in BS EN 1504-2.

PRACTICAL INFORMATION FOR INTERCRETE 4890

Colour	Limited colour range available
Gloss Level	Eggshell
Volume Solids	32% ± 1%
Density	1.2kg/m ³ (11.1lb/gal)
Typical Thickness	Total 130 microns, applied in two coats of 65 microns (2.6 mils) dry equivalent to 203 microns (8.1 mils) wet per coat.
Practical Coverage	5m ² per litre per coat (2 coats required). Practical coverage will depend upon the complexity and porosity of the area being coated and appropriate losses must be taken into consideration.
Method of Application	Airless Spray, Roller, Brush
Shelf Life	24 months at 20°C (68°F).
Pack Size	15 litre packs
Working Pot Life	20°C (68°F) 45 minutes

Drying Time	Overcoating interval with self			
	Touch Dry	Hard Dry	Minimum	Maximum
10°C (50°F)	4 hours	24 hours	6 hours	Extended ¹
20°C (68°F)	2 hours	12 hours	2 hours	Extended ¹
30°C (86°F)	60 minutes	6 hours	90 minutes	Extended ¹
40°C (104°F)	30 minutes	2 hours	40 minutes	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

Drying times are dependent upon ambient conditions. The figures quoted above have been determined at the quoted temperature and 50% relative humidity.

COMPLIANCE AND CERTIFICATION

When used as part of an approved scheme, this material has the following certification:

- Suitable for surface protection systems principles 1.3, 2.2, 8.2 as defined in BS EN 1504-2.



Protective Coatings

Water Based Acrylic

SPECIFICATION CLAUSE

The anti-carbonation coating shall be a single component, waterproof coating incorporating an active biocide that is retained in-film. It shall be CE-marked in accordance with BS EN 1504-2, and shall comply with the following performance specification:

- Water vapour transmission no less than 20/m²/day in accordance with BS EN ISO 7783-2.
- Carbon dioxide diffusion resistance number of no less than 4.17 x 10⁶ in accordance with BS EN 1062-6 (equivalent concrete thickness of 1384mm and equivalent air layer thickness 547m at 132µm dry film thickness).

SURFACE PREPARATION

Concrete and Masonry

All areas to be coated must be dry, free from all unsound material, i.e. dust, oil, grease, corrosion by-products and organic growth. Surface laitance and any soft, sandy or flaking material should be removed by mechanical means back to a sound surface. Techniques capable of achieving the required preparation such as wet grit or water blasting should be used. All Intercrete concrete repair mortars must be allowed to cure for a minimum of 72 hours. Concrete and cementitious screeds or renders must be a minimum of 10 days old and preferably 28 days old.

APPLICATION

Mixing

Intercrete 4890 is supplied as a single component liquid.

Airless Spray

Recommended

Tip Range 0.43-0.53 mm (17-21 thou)

Total output fluid pressure at spray tip not less than 141 kg/cm² (2010 p.s.i.)

Brush

Recommended

Roller

Recommended

Work Stoppages / Clean Up

Do not allow material to remain in hoses, guns or spray equipment. Thoroughly flush all equipment with clean water.

Clean all equipment immediately after use with warm soapy water. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency of cleaning will depend upon amount sprayed, temperature and elapsed time, including any delays. All surplus material and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

Water Based Acrylic

PRODUCT CHARACTERISTICS

Priming

Ensure concrete substrate moisture content is less than 20% wood moisture equivalent. Apply Intercrete 4816 (formerly Flexcrete Bond-Prime) to prepared surfaces at a rate of up to 5m²/litre by brush, roller or airless spray. Priming using a thinned coat of Intercrete 4890 is also suitable. Ensure complete coverage; rough or porous surfaces will increase consumption.

Placing

Apply the first coat of Intercrete 4890 by brush, roller or airless spray. Allow to dry for 1-4 hours in ideal conditions, until touch dry, before applying a second coat. To assist application and to act as a guide to coverage, each coat may be applied in a contrasting colour.

Reinforcing Cracks and Joints

Intercrete 4890 will accommodate hairline cracks but larger static cracks will require to be filled with the appropriate Intercrete filler. Fill live cracks, construction joints and joints between dissimilar materials with a suitable exterior grade flexible filler and reinforce the membrane with an Intercrete tape embedded in the Intercrete 4890 centrally over the crack or joint. Allow to dry and if necessary, lightly sand to remove any prominent edges before overcoating the whole area with two coats of material. Overall reinforcement incorporating random weave glass fibre matting may be used over larger areas. Please contact International Protective Coatings for further advice.

CE mark applies to products manufactured at Tomlinson Road, Leyland, PR25 2DY England, under reference 2797-CPR-530942.

APPLICATION TIPS

- If possible, complete work using only one batch number. As with any paint, avoid using different batches on the same elevation or inter-mix batches to ensure full continuity of colour.
- Rough, porous or irregular substrates will reduce coverage.
- For brush application, use wide, soft nylon or bristle brushes.
- For roller application use heavy nap ¾" or 1" synthetic cover.
- Regularly check coating thickness during application using the wet film thickness gauge available from AkzoNobel.
- Clean brushes and rollers occasionally during use. Clean spray nozzles regularly to avoid blockages.
- The product is through-cured in 2-24 hours, dependent on ambient temperature.
- Cold Weather Working (See separate Guide): ≥3°C (37°F) on a rising thermometer, ≥5°C (41°F) on a falling thermometer.
- Protect from prolonged storage at temperature higher than 35°C (95°F).

Water Based Acrylic

TECHNICAL DATA / MECHANICAL CHARACTERISTICS

Standard and Property	BS EN 1504-2 Requirement	Result
EN 1542 Adhesive Bond	$\geq 0.8\text{MPa}$ Crack bridging flexible systems	$> 3.0\text{MPa}$
EN 13501-1 Reaction to Fire	Euroclass	Euroclass B-s1, d0
BS 903-A2 Tensile Strength		0.7MPa
BS 903-A2 Elongation at Break		272% at 130 μm DFT
EN 1062-3 Liquid Water Transmission Rate (Capillary Absorption and Permeability to Liquid water)	Class III (low) $w < 0.1\text{kg}\cdot\text{m}^{-2}\cdot\text{h}^{-0.5}$	$w = 0.041\text{ kg}\cdot\text{m}^{-2}\cdot\text{h}^{-0.5}$ at 240 μm
EN 1062-6 Permeability to CO ₂	R $\geq 50\text{m}$	547m at 130 μm DFT
BS EN 7783-2 Water Vapour Permeability (Equivalent Air Layer Thickness)	Class 1 (Permeable) S _D <5m	1.09m
EN 1062-7 Static Crack Bridging	Class A4 (> 1250 μm)	1650 μm at 130 μm DFT at 20°C
EN 11507:2007 Accelerated Weathering		No blistering, cracking or flaking after 20000 hours (in accordance with BS EN ISO 4682)

SAFETY PRECAUTIONS

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s), and should not be used without reference to the Safety Data Sheet (SDS).

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

Important Note

The information in this data sheet is not intended to be exhaustive; any person using the product for any purpose other than that specifically recommended in this data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at their own risk. All advice given or statements made about the product (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability at all for the performance of the product or for (subject to the maximum extent permitted by law) any loss or damage arising out of the use of the product. We hereby disclaim any warranties or representations, express or implied, by operation of law or otherwise, including, without limitation, any implied warranty of merchantability or fitness for a particular purpose. All products supplied and technical advice given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to check with their local representative that this data sheet is current prior to using the product.

This Technical Data Sheet is available on our website at www.international-marine.com or www.international-pc.com, and should be the same as this document. Should there be any discrepancies between this document and the version of the Technical Data Sheet that appears on the website, then the version on the website will take precedence.

Copyright © AkzoNobel, 12/04/2019.

All trademarks mentioned in this publication are owned by, or licensed to, the AkzoNobel group of companies.

www.international-pc.com