Intercrete® 4871

Steel Reinforcement Protection

PRODUCT DESCRIPTION

A two component, water based, polymer modified cementitious anti-corrosive coating.

INTENDED USES

Specifically designed to rapidly reinstate the passivating layer around steel reinforcement to give long term corrosion protection as part of an Intercrete concrete repair system.

Typically brush applied in two coats at 1mm per coat with fast overcoating.

PRACTICAL INFORMATION FOR INTERCRETE 4871

Colour	Grey
Gloss Level	Matt
Volume Solids	100% (based on wet film thickness applied being equal to dry film thickness)
Typical Thickness	Applied as a two coat system at 1000 microns (40 mils) per coat
Theoretical Coverage	Typically 45 linear metres of 10mm steel bar per 5kg composite pack
Practical Coverage	Allow appropriate loss factors
Density	1800 kg/m³ (112.369 lb/ft³)
Method of Application	Brush

Drying Time

			Overcoating interval with self	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
20°C (68°F)	5 hours	18 hours[1]	45 minutes	7 days[2]

[1] Applied at 1000µm (40 mils); may depend on weather conditions
[2] If the maximum overcoating interval is exceeded the surface must be thoroughly cleaned and saturated prior to overcoating.

Intercrete concrete repair mortars can be applied approximately 2-6 hours after the application of the final coat of Intercrete 4871

REGULATORY DATA

Flash Point (Typical)	Not applicable	
VOC	0 g/lt	Calculated

See Product Characteristics section for further details

SURFACE PREPARATION

Steel Reinforcement Surfaces

All surfaces to be coated should be clean and free from contamination. Prior to application all surfaces should be assessed and treated in accordance with ISO 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

A sharp, angular surface profile of 75-100 microns (3-4 mils) is recommended.

Hand or Power Tool Preparation

Hand or power tool clean to a minimum St3 (ISO 8501-1:2007) or SSPC-SP3.

This method of surface preparation is only acceptable where abrasive blast cleaning is not possible due to environmental constraints. There should be no chlorides present in the surrounding concrete.

Hand or power tool prepared surfaces should be coated as soon as possible. The time between surface preparation and application must not exceed 24 hours.

Intercrete 4871 can be applied to damp steel substrates where excess standing or pooled water has been removed.

APPLICATION

Mixing

Intercrete 4871 is supplied in two parts; a liquid binder component (Part A) and a powder component (Part B). Shake Part A thoroughly and pour into a suitable mixing container, then slowly add Part B whilst stirring with a mechanical agitator. Mix for 5 minutes with regular scraping of the container sides to prevent lumps from forming. Once the unit has been mixed it should be used within the working pot life specified.

For small repair areas, mix quantities for 2-3 minutes using the kit supplied to give a smooth lump free consistency. Use the mix ratio provided.

Do not add water or other materials to this product.

Mix Ratio

1 part(s) : 3 part(s) by volume

Working Pot Life

20°C (68°F)
60 minutes

Brush	Recommended	Small areas only

Thinner

DO NOT THIN

Cleaner

Clean Water

Work Stoppages

Thoroughly clean all equipment with clean water. Product containers should be resealed to prevent drying out of the product.

Clean Up

Clean all equipment immediately after use with clean water.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

PRODUCT CHARACTERISTICS

Always consult the Intercrete 4871 Application Guidelines prior to use.

This datasheet provides general guidance on the use of Intercrete 4871. Specific project requirements will be dependent upon the substrate type, substrate condition, service end use and environmental conditions. Always consult International Protective Coatings to confirm that Intercrete 4871 is suitable for the intended end use.

The detailed project specification provided by International Protective Coatings must be followed at all times.

Intercrete 4871 must be protected from freezing at all times during storage and transport. The recommended storage temperature is between 4°C (39°F) and 25°C (77°F).

Surface temperature must always be a minimum of 3°C (5°F) above dew point.

This product will not cure adequately below 5°C (41°F). For maximum performance, curing temperatures should be between 10°C (50°F) and 35°C (95°F).

Mechanical Characteristics
(typical values)

Compressive Strength	35MPa
Flexural Strength	10Mpa
Water Permeability	6 x 10^{-16}m/s (2mm DFT of Intercrete 4871 = 1000mm of typical concrete)

Note: VOC values are typical and are provided for guidance purpose only. These may be subject to variation depending on factors such as differences in colour and normal manufacturing tolerances.

SYSTEMS COMPATIBILITY

Intercrete 4871 should always be applied directly to correctly prepared steel reinforcement.

The following repair mortar(s) should be used in combination with Intercrete 4871:

Intercrete 4801
Intercrete 4802

ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available at www.international-pc.com:

- Definitions & Abbreviations
- Surface Preparation
- Intercrete 4871 Application Guidelines

Individual copies of these information sections are available upon request.

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 Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

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.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

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

PACK SIZE	5kg packs For availability of other pack sizes, contact International Protective Coatings.	
SHIPPING WEIGHT (TYPICAL)	Unit Size	
	5 kg	5.11 kg
STORAGE	Shelf Life	12 months minimum at 25°C (77°F).

Important Note

www.international-pc.com