

Intercure 420

Rapid Recoat Epoxy



Product Description

A two component, high solids, low VOC epoxy micaceous iron oxide coating formulated on proprietary polymer technology which provides rapid cure and overcoating even under low temperature conditions.

Intended Uses

As a high build intermediate to provide excellent barrier protection as part of a high performance system suitable for use in aggressive environments including offshore, bridges, chemical and petrochemical plants, power stations, pulp and paper mills and industrial building.

Can be used as a barrier coating applied direct to steel where the environment is non aggressive.

The incorporation of plate-like micaceous iron oxide pigment, both increases the barrier effect and improves long term overcoating properties of the system making this material ideally suitable for application in the fabrication shop, prior to shipping, with final overcoating at site.

The rapid curing and overcoating properties of Intercure 420 provide production flexibility, making this product suitable for use both in new construction and on site as a maintenance coating.

Practical Information for Intercure 420

Colour	Natural MIO, Silver grey, Light grey
Gloss Level	Matt
Volume Solids	70%
Typical Thickness	100-175 microns (4-7 mils) dry equivalent to 143-250 microns (5.7-10.0 mils) wet
Theoretical Coverage	5.60 m ² /litre at 125 microns d.f.t and stated volume solids 225 sq.ft/US gallon at 5 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless spray, Air spray, Brush, Roller
Drying Time	

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			<i>Minimum</i>	<i>Maximum</i>
5°C (41°F)	75 minutes	7 hours	5 hours	Extended*
15°C (59°F)	50 minutes	4 hours	3 hours	Extended*
25°C (77°F)	40 minutes	2 hours	2 hours	Extended*
40°C (104°F)	30 minutes	1 hour	1 hour	Extended*

*See International Protective Coatings Definitions and Abbreviations

Regulatory Data

Flash Point	Base (Part A) 29°C (84°F)	C/A (Part B) 26°C (79°F)	Mixed 27°C (81°F)
Product Weight	1.59-1.64 kg/l (range) (13.27-13.69 lb/gal)		
VOC	320 g/l	UK - PG6/23(92), Appendix 3	
	2.75 lb/gal (330 g/l)	USA - EPA Method 24	



Ecotech is an initiative by International Protective Coatings a world leader in coating technology to promote the use of environmentally sensitive products across the globe.

Intercure 420

Rapid Recoat Epoxy

Surface Preparation

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Grit Blast Cleaning

Abrasive grit blast clean to Sa2½ (ISO 8501-1:1988) or SSPC-SP6. If oxidation has occurred between blasting and application of Intercure 420, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

A sharp, angular surface profile of 50-75 microns (2-3 mils) is recommended.

Primed Surfaces

All suitable primers for use under Intercure 420 should be applied over grit blast cleaned surfaces to Sa2½ (ISO 8501-1:1988) or SSPC SP6.

A sharp, angular surface profile of 50-75 microns (2-3 mils) is recommended.

Shop Primed Surfaces

Weld seams and damaged areas should be grit blast cleaned to Sa2½ (ISO 8501-1:1988) or SSPC SP6.

If the shop primer shows extensive or widely scattered breakdown overall grit sweep blasting may be necessary.

If the shop primer was applied over shot blasted surfaces, overall grit sweep blasting will be necessary prior to the application of Intercure 420.

Zinc Primed Surfaces

Ensure that the surface of the primer is clean, dry and free from contamination and zinc salts before application of Intercure 420. Ensure zinc primers are fully cured before overcoating.

If the zinc primer was applied over shot blasted surfaces, overall grit sweep blasting will be necessary prior to application of Intercure 420.

Application

Mixing

Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed it must be used within the working pot life specified.

- (1) Agitate Base (Part A) with a power agitator.
- (2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.

Mix Ratio

3 parts : 1 part by volume

Working Pot Life

5°C (41°F)	15°C (59°F)	25°C (77°F)	40°C (104°F)
8 hours	4 hours	2 hours	45 minutes

Airless Spray

Recommended - Tip range 0.43-0.53 mm (17-21 thou)
- Total output fluid pressure at spray tip not less than 176 kg/cm² (2,500 p.s.i.)

Air Spray (Pressure Pot)

Recommended Gun DeVilbiss MBC or JGA
Air Cap 704 or 765
Fluid Tip E

Brush

Suitable - small areas only Typically 75 microns (3 mils) can be achieved.

Roller

Suitable - small areas only Typically 50-75 microns (2-3 mils) can be achieved.

Thinner

International GTA220 (or GTA415) Do not thin more than allowed by local environmental legislation.

Cleaner

International GTA822 (or GTA415)

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA822. Once units of paint have been mixed they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly mixed units.

Clean Up

Clean all equipment immediately after use with International GTA822. 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 materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

Intercure 420

Rapid Recoat Epoxy

Product Characteristics

Low Temperature Curing

Intercure 420 is capable of curing at temperatures below 0°C (32°F). However, this product should not be applied at temperatures below 0°C (32°F) where there is a possibility of ice formation on the substrate.

Temperature	Touch Dry	Hard Dry	Overcoating interval with recommended topcoats	
			<i>Minimum</i>	<i>Maximum</i>
-5°C (23°F)	2 hours	20 hours	20 hours	Extended*
0°C (32°F)	90 minutes	12 hours	12 hours	Extended*

*See International Protective Coatings Definitions and Abbreviations

Touch dry times shown above are actual drying times due to chemical cure, rather than physical set due to solidification of the coating film at temperatures below 0°C (32°F).

This product must only be thinned using International thinners. The use of alternative thinners, particularly those containing Ketones, can severely inhibit the curing mechanism of the coating.

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

In common with all epoxies Intercure 420 will chalk and discolour on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

This product is frequently used as a "travel coat" prior to final overcoating on site. To ensure best extended overcoating properties ensure over-application does not occur and that the surface is fully cleaned of any contamination which may be present in the surface texture due to the coarse nature of the micaceous iron oxide pigmentation.

As with all products with high micaceous iron oxide levels, only relatively dark colours can be formulated, consequently with some colours of thin film finishes two coats may be needed to give good coverage.

Absolute measured adhesion of topcoats to aged Intercure 420 is less than that to fresh material, however, it is adequate for the specified end use.

Systems Compatibility

Please consult International Protective Coatings for specific information regarding application to prefabrication primers.

The following primers are recommended for Intercure 420:

- Intercure 200
- Intergard 251
- Intergard 269
- Interzinc 12 (mist coat or tie coat recommended)*
- Interzinc 22 (mist coat or tie coat recommended)*
- Interzinc 42
- Interzinc 52
- Interzinc 315

The following topcoats are recommended for Intercure 420:

- Intercryl 530
- Interfine 629 HS
- Intergard 740
- Interthane 990

For other suitable primers/topcoats, please consult International Protective Coatings.

* See relevant product data sheet for details.

Intercure 420

Rapid Recoat Epoxy

Additional Information

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following sections of the International Protective Coatings data manual:

- Definitions & Abbreviations
- Surface Preparation
- Paint Application
- Theoretical & Practical Coverage

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	20 litre unit	Intercure 420 Base	15 litres in a 20 litre container
		Intercure 420 Curing Agent	5 litres in a 5 litre container
	4 gallon unit	Intercure 420 Base	3 gallons in a 5 gallon container
		Intercure 420 Curing Agent	1 gallon in a 1 gallon container
For availability of other pack sizes contact International Protective Coatings			
Shipping Weight	U.N. Shipping No. 1263		
	20 litre unit	29.5 kg (65.0 lb)Base (Part A)	5.2 kg (11.5 lb) Curing Agent (Part B)
	4 gallon unit	22.4 kg (49.4 lb)Base (Part A)	4.0 kg (8.9 lb) Curing Agent (Part B)
Storage	Shelf Life		
	12 months minimum at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.		

Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Any warranty, if given, or specific Terms & Conditions of Sale are contained in International's Terms & Conditions of Sale, a copy of which can be obtained on request. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or 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 whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

It is the user's responsibility to check that this sheet is current prior to using the product. Issue date: 23/03/2001

Copyright © International Paint Ltd.  and International are trademarks.

International Protective Coatings

Worldwide Availability

World Centre	Asia Region	Australasia Region	Europe Region	Middle East Region	North America Region	South America Region
P.O Box 20980 Oriol House 16 Connaught Place London, W2 2ZB England	3 Neythal Road Jurong Town Singapore 628570	115 Hyde Road Yeronga Brisbane Queensland Australia	P.O Box 20980 Oriol House 16 Connaught Place London, W2 2ZB England	PO Box 37 Dammam 31411 Saudi Arabia	6001 Antoine Drive Houston Texas 77091	Av Paiva 999, Neves, Sao Gonçalo, Rio de Janeiro Brazil

Tel: (44) 20 7479 6000	Tel: (65) 663 3066	Tel: (61) 7 3892 8866	Tel: (44) 20 7479 6000	Tel: (966) 3 812 1044	Tel: (1) 713 682 1711	Tel: (55) 21 624 7100
Fax: (44) 20 7479 6500	Fax: (65) 266 5287	Fax: (61) 7 3892 4287	Fax: (44) 20 7479 6500	Fax: (966) 3 812 1169	Fax: (1) 713 684 1514	Fax: (55) 21 624 7123
		H&S (61) 1800 807 001				

Local Office:

Tel: 0191 469 6111 Fax: 0191 495 0676