

Direct to Metal Polyaspartic

PRODUCT DESCRIPTION

Intercure 4500 is a low VOC, high solids, rapid cure primer/finish, offering excellent anticorrosive protection and long term aesthetic durability in moderately corrosive environments (ISO 12944-2 C3). Based upon innovative polyaspartic resin technology, Intercure 4500 is designed to be applied as a single coat direct-to-metal using standard application equipment.

In replacing alternative two coat systems for C3 environments, Intercure 4500 offers corrosion protection and aesthetic performance in a single coat. Its rapid cure characteristics (even at low temperatures) and single coat application help optimise application time and reduce labour costs.

INTENDED USES

Low temperature rapid cure and early hardness development make Intercure 4500 ideal for fabrication shops looking to reduce heating costs and improve productivity, or for facilities located in colder climates. Intercure 4500 can offer significant benefits to OEM manufacturers where production and process efficiency are of major importance.

PRACTICAL INFORMATION FOR INTERCURE 4500

Colour Limited colour range available

Gloss Level Semi-gloss Volume Solids $77\% \pm 2\%$

Typical Thickness 150-200 microns (6-8 mils) dry equivalent to

195-260 microns (7.8-10.4 mils) wet

Theoretical Coverage 4.40 m²/litre at 175 microns d.f.t and stated volume solids

176 sq.ft/US gallon at 7 mils d.f.t and stated volume solids

Practical Coverage Allow appropriate loss factors

Method of Application Airless Spray, Air Spray

Drying Time

Overcoating interval with self

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
5°C (41°F)	60 minutes	3.5 hours¹	3.5 hours	12 months
15°C (59°F)	45 minutes	2.5 hours ¹	2.5 hours	12 months
25°C (77°F)	30 minutes	2 hours ¹	2 hours	12 months
40°C (104°F)	15 minutes	1.5 hours ¹	1.5 hours	12 months

¹ The drying times quoted have been determined at the quoted temperature and 50% relative humidity.

REGULATORY DATA

Flash Point Part A 50°C (122°F); Part B 158°C (316°F); Mixed 54°C (129°F)

Product Weight 1.50 kg/l (12.5 lb/gal)

VOC 1.87 lb/gal (225 g/lt) EPA Method 24

See Product Characteristics section for further details





Direct to Metal Polyaspartic

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 8504:2000.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Steel Substrates

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Intercure 4500, 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.

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. Sa2½ (ISO 8501-1:2007), or SSPC SP6, abrasive blasting), prior to the application of Intercure 4500.

APPL	.ICAT	ION

Mixing

Brush

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

Working Pot Life 5°C (41°F) 15°C (59°F) 25°C (77°F) 40°C (104°F)

3 hours 2 hours 1 hour 45 minutes

Airless Spray Recommended Tip Range 0.38-0.48 mm (15-19 thou)

Total output fluid pressure at spray tip not less

than 176 kg/cm² (2503 p.s.i.)

Air SprayRecommendedGunDeVilbiss MBC or JGA(Pressure Pot)Air Cap704 or 765

Fluid Tin F

Fluid Tip E

Suitable - Touch up and Typically 3.0-5.0 mils (75-125 microns) can be small areas only achieved

Roller Suitable - Touch up and

small areas only

Thinner International GTA713 Do not thin more than allowed by local

(or GTA056) environmental legislation. Do not use alternative

thinners.

Cleaner International GTA713 Do not use alternative cleaners.

(or GTA056)

Work Stoppages Do not allow material to remain in hoses, gun or spray equipment.

Thoroughly flush all equipment with International GTA713. 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 GTA713. 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.



Direct to Metal Polyaspartic

PRODUCT CHARACTERISTICS

The detailed Intercure 4500 Application Guidelines should be consulted prior to use.

Maximum film build in one coat is best attained by airless spray. When applying by methods other than airless spray, the required film build is unlikely to be achieved. Application by air spray may require a multiple cross spray pattern to attain maximum film build. Low or high temperatures may require specific application techniques to achieve maximum film build.

When applying Intercure 4500 by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

Apply in good climatic conditions. The temperature of the surface to be coated must be at least 3°C (5°F) above the dew point.

Application at excessively high relative humidity, or under conditions where condensation is likely to occur, may result in immediate or premature loss of gloss. It is recommended that relative humidity should not exceed 85% during application and cure. Application at humidities greater than 50% may result in faster drying times.

Care should be exercised to avoid application in excess of 350 microns (14 mils) dry film thickness.

Higher film thicknesses than recommended will result in higher gloss appearance.

When applying Intercure 4500 in confined spaces ensure adequate ventilation.

As with other fast dry coating systems care should be taken to prevent overspray contamination of previously coated work pieces.

Intercure 4500 is not designed for continuous water immersion.

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.

Low molecular weight reactive additives, which will form part of the film during normal ambient cure conditions, will also affect VOC values determined using EPA Method 24.

SYSTEMS COMPATIBILITY Intercure 4500 has been developed as a direct-to-metal coating. Intercure 4500 is not normally topcoated with products other than itself.



Direct to Metal Polyaspartic

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
- · Paint Application
- · Theoretical & Practical Coverage
- Intercure 4500 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.

Warning: Contains isocyanate. Wear air-fed hood for spray application.

PACK SIZE	Unit Size	Part A Vol Pack	Part B Vol Pack				
	20 litre	16 litre 20 litre	4 litre 5 litre				
	5 US gal	4 US gal 5 US gal	1 US gal 1 US gal				
For availability of other pack sizes, contact International Protective Coatings.							
SHIPPING WEIGHT	Unit Size	Part A	Part B				
	20 litre	26 kg	5.1 kg				
	5 US gal	57.1 lb	10.6 lb				
STORAGE	Shelf Life	12 months at 25°C (77°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.					

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 International Paint representative that this data sheet is current prior to using the product.

Copyright © AkzoNobel, 29/03/2011.

XInternational, International and all product names mentioned in this publication are trademarks of, or licensed to, AkzoNobel.

www.international-pc.com