

Etch Primer

PRODUCT DESCRIPTION

A single component modified polyvinyl butyral, phosphoric acid etch primer free from zinc chromate.

INTENDED USES

As a pretreatment primer designed to promote adhesion and seal the surface of non-ferrous metals such as aluminium, copper, brass, cadmium, zinc and nickel.

Interprime 539 is particularly suitable for priming galvanised steel surfaces.

PRACTICAL INFORMATION FOR INTERPRIME 539

Colour	Yellow, Pink
Gloss Level	Matt
Volume Solids	24%
Typical Thickness	10-20 microns (0.4-0.8 mils) dry equivalent to 42-83 microns (1.7-3.3 mils) wet
Theoretical Coverage	16 m ² /litre at 15 microns d.f.t and stated volume solids 642 sq.ft/US gallon at 0.6 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	
			Minimum	Maximum
5°C (41°F)	30 minutes	60 minutes	2 hours	Extended ¹
15°C (59°F)	20 minutes	45 minutes	60 minutes	Extended ¹
25°C (77°F)	15 minutes	30 minutes	60 minutes	Extended ¹
40°C (104°F)	10 minutes	20 minutes	60 minutes	Extended ¹

¹ See International Protective Coatings Definitions and Abbreviations

Overcoating is dependent upon environmental conditions. See product characteristics for further advice.

REGULATORY DATA

Flash Point (Typical)	28°C (82°F)		
Product Weight	1.06 kg/l (8.8 lb/gal)		
VOC	6.20 lb/gal (744 g/l) 701 g/kg	EPA Method 24 EU Solvent Emissions Directive (Council Directive 1999/13/EC)	

See Product Characteristics section for further details

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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.

The preferred method of treating non-ferrous surfaces prior to application of International Protective Coating systems is to brush blast to Sa1 (ISO 8501-1:2007) or SSPC-SP7 or abrade using coarse emery paper following treatment as described above. When blast cleaning is employed, a low air pressure should be used with a fine grade of abrasive (80 mesh) and the nozzle held 1 metre from the surface. Interprime 539 should only be used when this is not possible.

Non-Ferrous Surfaces

Ensure surface is clean, dry and free from metal corrosion products.

When substrate is aluminium or light alloy, the surface should be solvent cleaned according to SSPC-SP1 and then either etched chemically, or physically by light blast cleaning. It is important to follow application of Interprime 539 with a paint system appropriate to the painting of aluminium.

Galvanised Steel

If the surface has not been subjected to hot phosphating before delivery to site, degrease to SSPC-SP1 and remove any white zinc corrosion products by hand abrasion cleaning.

APPLICATION

Mixing	This material is a one component coating and should always be mixed thoroughly with a power agitator before application.		
Mix Ratio	Not applicable		
Airless Spray	Recommended	Tip Range 0.25-0.38 mm (10-15 thou) Total output fluid pressure at spray tip not less than 112 kg/cm ² (1593 p.s.i.)	
Air Spray (Pressure Pot)	Suitable	Gun	DeVilbiss MBC or JGA
		Air Cap	704 or 765
		Fluid Tip	E
Air Spray (Conventional)	Recommended	Use suitable proprietary equipment	
Brush	Suitable	Care should be taken to avoid over-application.	
Roller	Suitable		
Thinner	International GTA220	See Product Characteristics	
Cleaner	International GTA220		
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA220.		
Clean Up	Clean all equipment immediately after use with International GTA220. 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.		

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PRODUCT CHARACTERISTICS

Care must be taken to ensure the surface to be treated is fully degreased, otherwise good adhesion of subsequent topcoats will not be achieved.

When applying Interprime 539 via air spray techniques, up to 10% addition of recommended thinner may be added to aid coating application and penetration.

When applying Interprime 539 via airless spray techniques, up to 5% addition of recommended thinner may be added to aid coating application and penetration.

When applying Interprime 539 in confined spaces ensure adequate ventilation.

Exposure to unacceptably low temperatures and/or high humidities during or immediately after application may result in incomplete cure and surface contamination that could jeopardise subsequent intercoat adhesion.

Dew or rain on this product while uncured may cause surface blush or browning and may impair its cure and adhesion of subsequent coats.

Do not apply when relative humidity exceeds 90% or when condensation is likely to occur.

Excessive film thickness may lead to splitting of the film when overcoated with high build systems.

Over-application of topcoating systems containing strong solvent blends can cause softening of Interprime 539. This can cause subsequent loss of adhesion as the topcoat dries/cures, and should be avoided.

Whilst Interprime 539 is capable of achieving extended recoat periods, long term exterior exposure in damp conditions is not recommended as this may lead to poor adhesion of subsequent topcoats. It is recommended that the overcoating interval is kept as short as possible. Consult International Protective Coatings for specific advice.

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

Interprime 539 has been designed as a primer for application to non-ferrous metals and galvanised steel surfaces.

The following topcoats are recommended for Interprime 539:

Intercure 200	Intergard 475HS
Intercure 200HS	Intergard 540
Intercure 420	Interlac 658
Intergard 251	Interplus 770
Intergard 269	Interplus 880
Intergard 400	Interprime 106
Intergard 410	Interseal 670HS

Always ensure sufficient dry film thickness of any subsequent topcoat systems have been applied in order to adequately protect substrate.

Consult International Protective Coatings for further details.

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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

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	Unit Size	Vol	Pack
	5 litre	5 litre	5 litre
For availability of other pack sizes, contact International Protective Coatings.			
SHIPPING WEIGHT (TYPICAL)	Unit Size		
	5 litre		5.8 kg
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.	

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.

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