

Etch Solution

PRODUCT DESCRIPTION

A phosphoric acid based mordant solution for treating galvanised steel.

INTENDED USES

For the chemical pretreatment of galvanised steel prior to the application of protective coating systems, in order to ensure good adhesion where blasting or abrasion is not possible.

PRACTICAL INFORMATION FOR INTERPRIME 160

Colour	Pale Blue			
Gloss Level	Not applicable			
Volume Solids	Not applicable			
Typical Thickness	Not applicable			
Theoretical Coverage	Not applicable (see Practical Coverage)			
Practical Coverage	Aim to apply at a rate of 20 m ² /litre			
Method of Application	Brush			
Drying Time	Overcoating Interval with recommended topcoats			
Temperature	Touch Dry	Hard Dry	<i>Minimum</i>	<i>Maximum</i>
10°C (50°F)			2 hours	2 days
15°C (59°F)			2 hours	2 days
25°C (77°F)			2 hours	2 days
40°C (104°F)			30 minutes	2 days

*Touch dry and hard dry information is not applicable for Interprime 160

REGULATORY DATA

Flash Point (Typical)	33°C (91°F)		
Product Weight	1.06 kg/l (8.8 lb/gal)		
VOC	2.75 lb/gal (330 g/l)	EPA Method 24	
	329 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)	

Protective Coatings

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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.

Galvanised Steel

Galvanised surfaces can be very variable. The preferred method of treatment for subsequent application of protective coatings systems is to sweep blast in order to provide a "physical key" to the substrate following degreasing and cleaning as described above. Alternatively, the substrate should be abraded to remove areas of passivated zinc products.

The surface should be washed to remove any traces of soluble zinc salts and allowed to dry before application of Interprime 160.

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	Not suitable	
Air Spray (Pressure Pot)	Not suitable	
Brush	Recommended	Aim to apply at a rate of 20 m ² /litre
Roller	Suitable	
Thinner	Clean Water*	*See Product Characteristics
Cleaner	Clean Water	
Work Stoppages	Thoroughly flush all equipment with clean water. Once units of Interprime 160 have been opened they should not be resealed and it is advised that after prolonged stoppages work recommences with freshly opened units.	
Clean Up	Clean all equipment immediately after use with clean 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 materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.	

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PRODUCT CHARACTERISTICS

Interprime 160 is only recommended for etching galvanised surfaces. It is not suitable for the pre-treatment of other non-ferrous metals such as aluminium.

This product contains phosphoric acid. Before commencing application reference should be made to the material safety data sheet (MSDS), and the appropriate personal protective equipment should be worn, e.g. gloves, goggles, face-mask etc.

Apply to a suitably prepared, clean galvanised surface and then allow to dry. The mordant solution will gradually react and the blue colour will change with the surface blackening. This should finally achieve a uniform dark grey colour. If this does not occur due to the presence of oils, grease, flux or passivation of the surface then this area will require abrasion and a second coat of Interprime 160.

Over-application will produce a dense black powdery layer which is not suitable for the application of subsequent topcoats. This will require either abrading or washing with fresh water to remove excess acid or powdery deposits, otherwise blistering and/or adhesion loss of topcoats can occur.

Thinning is not normally required. However, if application trials result in a dense black powdery surface, then Interprime 160 should be diluted with clean, potable water and further application trials undertaken.

It should be noted that in all circumstances galvanised steelwork is likely to require a similar coating thickness for adequate protection as might be needed on steel substrates. Application of thin films can result in penetration of this paint film by zinc salts in wet corrosive environments.

This product has the following specification approvals:

- Complies with UK Department of Transport Item No. 155

Interprime 160 was originally formulated to meet the requirements of British Rail's "T-Wash" solution.

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

Interprime 160 treated galvanised steel is suitable for overcoating with most International Protective Coatings systems. However, care should be taken with regard to the dimensions of the galvanised steel. Thin flexible substrates, for example, may not be suitable for overcoating with thick high performance systems as in many cases these have limited flexibility.

Suitable topcoats are:

Intercure 200	Intergard 410
Intercure 420	Intergard 475HS
Intergard 251	Interlac 658
Intergard 269	Interplus 770
Intergard 400	

For other suitable topcoats, consult International Protective Coatings.

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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
	10 litre	10 litre	10 litre
For availability of other pack sizes, contact International Protective Coatings.			
SHIPPING WEIGHT (TYPICAL)	Unit Size		
	10 litre		10.45 kg
STORAGE	Shelf Life	24 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.

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.

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