

Vinyl Ester

PRODUCT DESCRIPTION

Ceilcote 380 Primer is a catalysed vinyl ester primer. It provides excellent bonding and adhesion for various polyester and vinyl ester linings, coatings and flooring systems, as well as for Ceilcote Hybrid Polymer systems.

INTENDED USES

As a primer for vinyl ester schemes over both steel and concrete. Used as a crucial component in Ceilcrete, Mat Reinforced (MR) and Lining Systems.

PRACTICAL INFORMATION FOR CEILCOTE 380 PRIMER

Colour	Translucent purple
Gloss Level	Not applicable
Volume Solids	100% reactive
Typical Thickness	See Product Characteristics section for further details
Practical Coverage	10 m ² /litre at 75 microns d.f.t and 75% volume solids 401 sq.ft/US gallon at 3 mils d.f.t and 75% volume solids (see Page 3 Product Characteristics)
Method of Application	Airless spray, Brush, Roller, Trowel

Drying Time

Temperature	Touch Dry	Hard Dry	Overcoating Interval with recommended topcoats	
			Minimum	Maximum
10°C (50°F)	90 minutes	5 hours	5 hours	4 weeks ¹
15°C (59°F)	60 minutes	4 hours	3 hours	4 weeks ¹
25°C (77°F)	45 minutes	90 minutes	2 hours	1 week ¹
35°C (95°F)	45 minutes	90 minutes	1 hour	3 days ¹

¹ When surface temperatures exceed 35°C (95°F) or are exposed to direct sunlight, overcoating should take place as soon as the coating may be walked on, in order to avoid intercoat adhesion issues.

Minimum overcoating intervals are indicative and overcoating may take place as soon as walk-on hardness is achieved.

REGULATORY DATA

Flash Point (Typical)	Part A 32°C (90°F); Part B 77°C (171°F); Mixed 32°C (90°F)	
Product Weight	1.04 kg/l (8.7 lb/gal)	
VOC	3.01 lb/gal (361 g/lit)	EPA Method 24
	229 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

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 steel 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

For immersion service or service in humid conditions or elevated temperatures, this product should be applied to surfaces which have been prepared by abrasive blast cleaning to Sa3 (ISO 8501-1:2007), SSPC SP5 or NACE #1. For dry environments abrasive blast cleaning to Sa2½ (ISO 8501-1:2007), SSPC SP10 or NACE #2 will be suitable. A minimum surface profile of 75 microns (3 mils) is required.

Ceilcote 380 Primer must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidised area should be reblasted to the standard specified above. Surface defects revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

Concrete Substrates

Concrete should be well cured prior to application of the flooring, lining or coating system. Refer to the Concrete Surface Preparation Guidelines for more information.

APPLICATION

Mixing	Ceilcote 380 Primer must always be mixed and applied in accordance with the detailed Application Guidelines for the subsequent system. The resin component of this material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the material has been mixed it must be used within the working pot life.			
	Do not mix more material than can be applied within the recommended pot life.			
Mix Ratio	50 part(s) : 1 part(s) by volume			
Working Pot Life	10°C (50°F) 40 minutes	15°C (59°F) 35 minutes	25°C (77°F) 30 minutes	35°C (95°F) 15 minutes
Airless Spray	Recommended	Tip Range 0.48-0.58 mm (19-23 thou) Total output fluid pressure at spray tip not less than 70 kg/cm ² (995 p.s.i.)		
Brush	Suitable			
Roller	Recommended	Use a short nap roller.		
Thinner	DO NOT THIN			
Cleaner	Ceilcote T-410 Solvent (or International GTA203)			
Work Stoppages	Do not allow material to remain in hoses, guns or spray equipment. Thoroughly flush all equipment with Ceilcote T410 or International GTA203. 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.			
	Once units have been mixed, work should continue until all mixed material has been used.			
Clean Up	Clean all equipment immediately after use with T-410 Solvent. Frequency of cleaning will depend upon amount applied, 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

The detailed Application Guidelines for the relevant Ceilcote system should always be consulted prior to use.

Although Ceilcote 380 Primer is 100% reactive, depending upon the application conditions, the practical volume solids may be lower and International Protective Coatings suggest a value of 75% for estimating spreading rate.

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

Ensure adequate ventilation is provided throughout application and curing. Dehumidification (DH) air conditioning and/or heating equipment may be necessary to control environmental conditions.

For all application steps, the surface temperature, air temperature and material temperature should be between 10°C (50°F) and 43°C (110°F).

Where application is by airless spray, care should be taken to avoid excessive thickness. For optimum adhesion, the materials should then be back-rolled to ensure an intimate contact with the surface.

Typical Thickness

Primer: 50-125 microns (2-5mils) dry equivalent to 67-167 microns (2.7-6.7 mils) wet. For concrete, a theoretical coverage rate of 7.5m²/litre (305sq.ft/ US gallon) is suggested (depending on porosity of concrete). Film thicknesses on concrete are not relevant as the intention is only to seal the porosity, not apply a layer over the concrete.

Basecoat/Topcoat (Resin + Powder): 1500 microns (60 mils) dry equivalent to 1765 microns (71 mils) wet, with a theoretical usage of 1m²/litre (40sq.ft/US gallon) of resin to 2.5kgm² (2sq.ft/lb) S1 Powder.

Laminate (Resin saturated glass mat): 800 microns (32 mils) with a theoretical coverage of 1.34m²/ litre (50sq.ft/US gallon)

For concrete substrates where film integrity spark testing of lining and coating systems applied over Ceilcote 380 Primer is required, a conductive powder should be added. The type and quantity of powder per litre (and gallon) of mixed resin is as follows:

C-1 Powder 0.14kg/l (1.2lb/gal).

The powder must first be added and mixed into Part A resin prior to adding Part B.

Where the overcoating interval is exceeded, confirm recoatability by wiping with styrene monomer. If the surface becomes 'tacky', adhesion is acceptable. If not softened by styrene, the surface must be sweep blasted or mechanically abraded to provide a non-glossy, abraded surface. Primed surface must be dry and free of foreign matter at time of lining, coating or flooring application.

Consult International Protective Coatings for temperature limits for specific end use requirements.

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

Ceilcote 380 Primer is designed for application to correctly prepared substrates.

It is compatible with various Ceilcote coatings and linings; consult International Protective Coatings or further advice.

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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. All work involving the application and use of this product should be performed in compliance with all relevant national Health, Safety and Environmental standards, regulations and legislation.

Proper ventilation must be provided during application and afterwards during curing (refer to product datasheets for typical curing times) to ensure safe limits and prevent fires and explosions. Forced extraction will be required in confined spaces. Ventilation and/or respiratory personal protective equipment (airfed hoods or appropriate cartridge masks) must be provided during application and curing. Take precautions to avoid skin and eye contact (overalls, gloves, goggles, masks, barrier cream, etc).

Before use, obtain, read and then follow the advice given on the Material Safety Data Sheets (Parts A and B if two-pack) and the Health and Safety section of the Coatings Applications Procedures for this product.

In the event that 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.

The detailed safety measures are dependent on application methods and the work environment. If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product and consult International Protective Coatings.

PACK SIZE	Unit Size	Part A		Part B	
		Vol	Pack	Vol	Pack
	15 litre	14.71 litre	20 litre	0.29 litre	0.7 litre
	5 US gal	5 US gal	5 US gal	12.5 fl oz	1 US pint
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	15 litre	17.06 kg		0.39 kg	
	5 US gal	47.8 lb		1 lb	
STORAGE	Shelf Life	6 months at 20°C (68°F). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition. During storage and shipment, Ceilcote 380 Primer initiator must not be exposed to temperatures exceeding 30°C (90°F). Refrigeration recommended. Best practice would be to hold Parts A and B in separate stores.			

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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