Interzone® 505

Glass Flake Epoxy

PRODUCT DESCRIPTION

A high solids, low VOC, high build epoxy primer/intermediate or finish coat, reinforced with chemically resistant high aspect ratio glass flake for enhanced durability and corrosion resistance.

INTENDED USES

For the protection of steelwork in all corrosive environments including splashzone areas on offshore structures, underdeck, decks and above water areas, pilings, pulp and paper mills, bridges and chemical plants.

To provide excellent long term, anti-corrosive and anti-abrasion protection in both new construction and maintenance situations.

As part of a non-slip deck system in conjunction with appropriate aggregate.

PRACTICAL INFORMATION FOR INTERZONE 505

Color	Limited color range
Gloss Level	Semi Gloss
Volume Solids	90%
Typical Thickness	12-20 mils (300-500 microns) dry equivalent to 13.3-22.2 mils (333-556 microns) wet
Theoretical Coverage	90 sq.ft/US gallon at 16 mils d.f.t and stated volume solids 2.25 m²/liter at 400 microns d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Brush, Roller

Drying Time

			Overcoating Interval with recommended topcoats	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
41°F (5°C)	20 hours	28 hours	28 hours	7 days[1]
59°F (15°C)	6 hours	14 hours	14 hours	5 days[1]
77°F (25°C)	3 hours	6 hours	6 hours	4 days[1]

[1] Maximum overcoating intervals are shorter when using polysiloxane topcoats. Consult International Protective Coatings for further details.

For curing at elevated temperatures an alternative curing agent is available. Contact International Protective Coatings for more information.

REGULATORY DATA

Flash Point (Typical) Part A 129°F (54°C); Part B 91°F (33°C); Mixed 95°F (35°C)

Product Weight 10.8 lb/gal (1.29 kg/l)

VOC 1.71 lb/gal (205 g/lt) EPA Method 24
164 g/kg EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

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SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by fresh water washing.

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

Abrasive Blast Cleaning

Abrasive blast clean to SSPC-SP6 or Sa2½ (ISO 8501-1:2007). If oxidation has occurred between blasting and application of Interzone 505, 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 surface profile of 2-3 mils (50-75 microns) is recommended.

Ultra High Pressure Hydroblasting/Abrasive Wet Blasting

May be applied to surfaces prepared to Sa2½ (ISO 8501-1:2007) or SSPC-SP6 which have flash rusted to no worse than Grade HB2½M (refer to International Hydroblasting Standards) or Grade SB2½M (refer to International Slurry Blasting Standards). It is also possible to apply to damp surfaces in some circumstances. Further information is available from International Protective Coatings.

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

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

Working Pot Life

41°F (5°C)	59°F (15°C)	77°F (25°C)
2.5 hours	90 minutes	60 minutes

Airless Spray

Recommended

Tip Range 21-31 thou (0.53-0.79 mm)
Total output fluid pressure at spray tip not less than 3000 psi (211 kg/cm²)

Air Spray (Pressure Pot)

Recommended

Gun DeVilbiss MBC or JGA
Air Cap 62
Fluid Tip AC

Brush

Suitable - Small areas only

Typically 3.0-4.0 mils (75-100 microns) can be achieved

Roller

Suitable - Small areas only

Typically 3.0-4.0 mils (75-100 microns) can be achieved

Thinner

International GTA220 (or International GTA415)

Do not thin more than allowed by local environmental legislation

Cleaner

International GTA822 (or International 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

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PRODUCT CHARACTERISTICS

Interzone 505 is suitable for both water immersion and exterior exposure. For water immersion a minimum system thickness of 18 mils (450 microns) is required to achieve long term anti-corrosive performance. For general exterior exposure in aggressive conditions a minimum system thickness of 14 mils (350 microns) is required.

If salt water is used in the wet blast process, the resulting surface must be thoroughly washed with fresh water before application of Interzone 505. With freshly blasted surfaces a slight degree of flash rusting is allowable, and is preferable to the surface being too wet. Puddles, ponding and accumulations of water must be removed.

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. Lower or high temperatures may require specific application techniques to achieve maximum film build.

For airless spray application best results will be achieved by using 3/8" (9 mm) lines with no whip ends. The pump should be a minimum of 45:1 ratio. Filters should be removed from the spray machine and gun, and fluid lines kept as short as possible.

Higher ratio pumps are recommended when long fluid lines are used.

When applying Interzone 505 by brush or roller, it may be necessary to apply multiple coats to achieve the total specified system dry film thickness.

In special cases where overcoating is required and curing has been at low temperatures and high relative humidities ensure no amine bloom is present prior to application of subsequent topcoats.

This product will not cure adequately below 41°F (5°C). For maximum performance ambient curing temperatures should be above 50°F (10°C). Surface temperature must always be a minimum of 5°F (3°C) above dew point.

When applying Interzone 505 in confined spaces, ensure adequate ventilation.

Condensation occurring during or immediately after application may result in a matte finish and an inferior film.Premature exposure to ponding water will cause a color change, especially in dark colors.

Films of Interzone 505 cured at an ambient temperature of 77°F (25°C) or greater, will be suitable for immersion in water after 24 hours.

Curing is retarded underwater. Some color change may be observed.

For curing at elevated temperatures an alternative curing agent is available. Contact International Protective Coatings for more information.

For further details regarding cure times and overcoatability, please contact International Protective Coatings.

Interchanging standard and elevated temperature curing agents during application to a specific structure will give rise to an observable color change due to the difference in the yellowing/discoloration process common to all epoxies on exposure to UV light.

In common with all epoxies, Interzone 505 will chalk and discolor on exterior exposure. However, these phenomena are not detrimental to anti-corrosive performance.

Where a durable cosmetic finish with good gloss and color retention is required, overcoat with recommended topcoats.

Interzone 505 can be used as a non-skid deck system by modification with addition of GMA132 (crushed flint) aggregate. Application should then be to a suitably primed surface. Typical thicknesses will be between 20-40 mils (500-1,000 microns). Preferred application is by a suitable large tip hopper gun (e.g. Sagola 429 or Air texture gun fitted with a 5-10 mm nozzle). Trowel or roller can be used for small areas. Alternatively, a broadcast method of application can be used. Consult International Protective Coatings for further details.

Interzone 505 is compatible with sacrificial and impressed current cathodic protection systems.

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 color and normal manufacturing tolerances.

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

SYSTEMS COMPATIBILITY

Interzone 505 can be applied directly to blasted steel but can also be used over the following primers for underwater systems:

Intergard 269
Interline 982

When used in aggressive exterior exposure environments the following primers are recommended for Interzone 505:

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

The following topcoats are recommended for Interzone 505:

Interfine 629HS
Interthane 990

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

* See relevant product data sheet for 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	Part A		Part B	
	Vol	Pack	Vol	Pack
20 liter	10.5 liter	20 liter	7 liter	10 liter
5 US gal	3 US gal	5 US gal	2 US gal	2 US gal

For availability of other pack sizes contact International Protective Coatings

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
20 liter	16.75 kg	8.76 kg
5 US gal	33.9 lb	18.3 lb

STORAGE

Shelf Life	12 months minimum at 77°F (25°C). Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.

Disclaimer

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