Interline® 104

Inorganic Zinc Rich Silicate

PRODUCT DESCRIPTION

A two component solvent based inorganic zinc rich ethyl silicate tank lining.

INTENDED USES

As a fast drying primer capable of providing good impact and abrasion resistance, combined with anti-corrosive protection in a single coat.

To provide corrosion protection to the internals of steel storage tanks containing a range of petroleum products, fuels, aggressive hydrocarbon solvents such as methanol, acetone, butyl acetate or other neutral cargoes.

PRACTICAL INFORMATION FOR INTERLINE 104

Colour	Grey
Gloss Level	Matt
Volume Solids	52%
Typical Thickness	100 microns (4 mils) dry equivalent to 192 microns (7.7 mils) wet
Theoretical Coverage	5.20 m²/litre at 100 microns d.f.t and stated volume solids 209 sq.ft/US gallon at 4 mils d.f.t and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Airless Spray, Air Spray, Roller, Brush

Drying Time

			Overcoating Interval with recommended topcoats	
Temperature	**Touch Dry**	**Hard Dry**	*Minimum*	*Maximum*
5°C (41°F)	60 minutes	4 hours	24 hours	10 days
15°C (59°F)	60 minutes	3 hours	24 hours	10 days
25°C (77°F)	60 minutes	2 hours	24 hours	10 days
40°C (104°F)	25 minutes	2 hours	24 hours	7 days

Dry times and overcoating times are dependent upon relative humidity - see Product Characteristics.

REGULATORY DATA

Flash Point (Typical)	Part A 32°C (90°F); Part B 15°C (59°F); Mixed 21°C (70°F)	
Product Weight	2.34 kg/l (19.5 lb/gal)	
VOC	5.15 lb/gal (618 g/l)	USA - EPA Method 24
	272 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)

See Product Characteristics section for further details

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.

Where necessary, remove weld spatter and smooth weld seams and sharp edges.

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

Abrasive Blast Cleaning

Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. If oxidation has occurred between blasting and application of Interline 104, 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 30-50 microns (1.2-2 mils) is recommended.

APPLICATION

Mixing

Interline 104 must be applied in accordance with the detailed International Protective Coatings Working Procedures for the application of Tank Linings.

Interline 104 is supplied in two parts, a Paste component (Part A) and a liquid Binder component (Part B). The liquid Binder (Part B) should be slowly added to the Paste (Part A) whilst stirring with a mechanical agitator. DO NOT ADD PASTE TO LIQUID. Material should be filtered prior to application and should be constantly agitated in the pot during spraying. Once the unit has been mixed, it should be used within the working pot life specified.

Mix Ratio

2.83 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)
8 hours	5 hours	4 hours	90 minutes

Airless Spray	Recommended	Tip Range 0.46-0.61 mm (18-24 thou) Total output fluid pressure at spray tip not less than 112 kg/cm² (1593 p.s.i.)
Air Spray (Pressure Pot)	Recommended	Gun DeVilbiss MBC or JGA Air Cap 704 or 765 Fluid Tip E
Brush	Suitable - small areas only	Typically 25-50 microns (1.0-2.0 mils) can be achieved
Roller	Suitable - small areas only	Typically 25-50 microns (1.0-2.0 mils) can be achieved
Thinner	International GTA803 (or International GTA415)	Do not thin more than allowed by local environmental legislation

Cleaner

International GTA803 or International GTA415

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA803. 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 GTA803. 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.

PRODUCT CHARACTERISTICS

The detailed Interline 104 Application Guidelines should be consulted prior to use.

Interline 104 is typically specified as a single coat system at 100 microns (4 mils) dry film thickness. Exact specification for total dry film thickness will be dependent upon service end use requirements. Consult International Protective Coatings for specification advice regarding tank lining application.

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 optimum film build. The use of other methods, e.g. brush or roller, may require more than one coat and are suggested only for small areas and initial stripe coating.

Surface temperature must always be a minimum of 3°C above dew point.

It is not recommended to apply Interline 104 at steel temperatures below 5°C (41°F) or in excess of 40°C (104°F).

When applying Interline 104 in confined spaces ensure adequate ventilation.

The minimum overcoating interval is dependent upon the relative humidity during cure. Below 65% relative humidity the minimum recoat period will normally be at least 24 hours, but will be dependent upon the ambient temperature and relative humidity during the application and curing period.

At relative humidities below 40%, curing will be retarded and humidity may need to be increased via suitable methods such as steam or water spraying.

Excessive film thickness and/or over-application of Interline 104 can lead to mudcracking, which will require complete removal of the affected areas by abrasive blasting and re-application in accordance with the original specification.

After the last coat has cured hard, the coating system dry film thickness should be measured using a suitable non-destructive magnetic gauge to verify the average total applied system thickness. The coating system should be free of all pinholes or other holidays. The cured film should be essentially free of runs, sags, drips, inclusions or other defects. All deficiencies and defects should be corrected. The repaired areas shall be retested and allowed to cure as specified before placing the finished lining into service. Consult International Protective Coatings Interline 104 Application Guidelines for proper repair procedures.

Maximum chemical resistance is not attained until the film has completely cured. Cure is a function of temperature, humidity and film thickness. In order to ensure that the coating is fully cured, it is recommended that the fresh water wash down procedure be carried out prior to being placed in service as detailed in the Interline 104 recommended working procedures.

This product has the following specification approvals:

- Food Contact - FDA Compliant: Liquid and Dry Foodstuffs.

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

When it is necessary for Interline 104 to be overcoated by itself due to low dry film thickness, the coating surface must be fresh and unweathered. A minimum of 50 microns (2 mils) d.f.t. of any subsequent coat of Interline 104 is needed to ensure good film formation.

Interline 104 should only be topcoated with itself, and should never be overcoated with another product.

Consult International Protective Coatings to confirm that Interline 104 is suitable for contact with the product to be stored.

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
- Interline 104 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.
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 drying (Refer to product datasheets for typical drying times) to keep solvent concentrations within 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 drying. 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
	10 litre	7.39 litre	10 litre	2.61 litre	5 litre
	For availability of other pack sizes, contact International Protective Coatings.				
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
	10 litre	22.24 kg		2.87 kg	
STORAGE	Shelf Life	Part A: 12 months minimum at 25°C (77°F). Part B: 4 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

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