Interline® 850

Epoxy Phenolic

PRODUCT DESCRIPTION

A two component, chemically resistant, high solids, high build epoxy phenolic tank and pipe lining.

INTENDED USES

To provide corrosion protection for the internals of steel storage tanks and pipes containing a range of products, including crude oil, unleaded gasoline blends, MTBE, jet fuels, caustic solutions, potable water and a selected range of aromatic and aliphatic solvents.

Resistant to different renewable/bio feedstocks and refine products (fuels) including animal/vegetable oils and fats, biodiesel, ethanol etc. Also resistant to methanol.

When used for potable water tank applications, please review the approval available at www.nsf.org for current listing information.

Certified to NSF/ANSI Standard 61

PRACTICAL INFORMATION FOR INTERLINE 850

Color	White, Gray, Buff
Gloss Level	Not applicable
Volume Solids	76%
Typical Thickness	4-6 mils (100-150 microns) dry equivalent to 5.3-7.9 mils (132-197 microns) wet
Theoretical Coverage	244 sq.ft/US gallon at 5 mils d.f.t and stated volume solids 6.08 m²/liter at 125 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*
50°F (10°C)	9 hours	24 hours	24 hours	30 days[1]
59°F (15°C)	8 hours	20 hours	20 hours	30 days[1]
77°F (25°C)	5 hours	8 hours	8 hours	30 days[1]
104°F (40°C)	3 hours	5 hours	5 hours	21 days[1]

[1] The values quoted relate to use within an enclosed tank environment. For situations where UV exposure between coats is likely, maximum overcoating intervals will be shorter. Contact International Protective Coatings for more details.

REGULATORY DATA

Flash Point (Typical) Part A 108°F (42°C); Part B 129°F (54°C); Mixed 109°F (43°C)

Product Weight 13.1 lb/gal (1.57 kg/l)

VOC

1.87 lb/gal (225 g/lt)	EPA Method 24
143 g/kg	EU Solvent Emissions Directive (Council Directive 1999/13/EC)
172 g/lt (1.43 lb/US Gal)	Chinese National Standard GB23985

See Product Characteristics section for further details

Interline® 850

Epoxy Phenolic

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.

Steel

This product must only be applied to surfaces prepared by abrasive blast cleaning to a minimum of SSPC-SP10 or Sa2½ (ISO 8501-1:2007).

A sharp, angular surface profile of 2-3 mils (50-75 microns) is recommended.

Interline 850 must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized 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.

Where local VOC regulations allow, surfaces may be primed with Interline 850 (thinned 10-15% GTA220) to 1.5 mils (40 microns) dry film thickness before oxidation occurs. Alternatively, the blast standard can be maintained by use of dehumidification.

Areas of breakdown, damage, weld seams etc., should be prepared to the specified standard (e.g. SSPC SP10 or Sa2½ (ISO 8501-1:2007) or power tool cleaned to SSPC SP11 or Pt3 (JSRA SPSS:1984)).

Concrete Substrates

Interline 850 is also suitable for application to concrete in certain conditions; please see Product Application Guidelines for further information.

APPLICATION

Mixing

Interline 850 must be applied in accordance with the detailed International Protective Coatings Working Procedures for the application of Tank Linings.

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

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

Working Pot Life

50°F (10°C)	59°F (15°C)	77°F (25°C)	104°F (40°C)
3 hours	2 hours	1 hour	30 minutes

Airless Spray

Recommended

Tip Range 21-27 thou (0.53-0.68 mm)
Total output fluid pressure at spray tip not less than 2503 psi (176 kg/cm²)

Air Spray (Pressure Pot)

Recommended

Gun DeVilbiss MBC or JGA
Air Cap 704 or 765
Fluid Tip E

Brush

Recommended - Small areas only

Typically 2.0-3.0 mils (50-75 microns) can be achieved

Roller

Recommended - Small areas only

Typically 2.0-3.0 mils (50-75 microns) can be achieved

Thinner

International GTA220
(or International GTA415 for NSF-approved schemes)

Thinning is not normally required. Consult the local representative for advice during application in extreme conditions. Do not thin more than allowed by local environmental legislation.

Cleaner

International GTA853
or International GTA415

Work Stoppages

Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA853. 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 GTA853. 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.

Interline® 850

Epoxy Phenolic

PRODUCT CHARACTERISTICS

The detailed Interline 850 Application Guidelines should be consulted prior to use.

Interline 850 is typically specified as a two coat system at 5 mils (125 µm) per coat to give a total coating system dry film thickness of 10 mils (250 microns). Exact specification for total dry film thickness will be dependent upon service end use requirements. Consult International Protective Coatings for specific advise regarding tank lining application.

When used as a primer coat applied at 1.5 mils (40 microns) dry film thickness Interline 850 can hold a blast for up to 28 days in the semi-protected environment of a tank interior. If moisture is present on the surface, oxidation will occur and reblasting will be required. As an alternative, a full coat may be applied, provided the overcoating intervals are adhered to and all surfaces are correctly cleaned and prepared prior to overcoating with Interline 850.

For potable water service, consult International Protective Coatings with regards to permissible thinning levels.

At temperatures below 77°F (25°C), it is recommended that Interline 850 is allowed a 15 minute induction period after mixing, prior to commencing 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, or initial stripe coating.

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

For general use, it is not recomended to apply Interline 850 at steel temperatures below 50°F (10°C). However for potable water storage only, Interline 850 may be applied at steel temperatures of 41°F (5°C) and above. Consult International Protective Coatings for specific cure schedules.

When applying Interline 850 in confined spaces, ensure adequate ventilation.

For multi-coat applications, exposure to low temperatures during, or immediately after application may result in incomplete cure and surface contamination that could jeopardise subsequent intercoat adhesion.

This product severely yellows when exposed to sunlight, and should not be used on tank exteriors where color stability is important.

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 850 Working Procedures for proper repair procedures.

Return to Service

The following minimum cure times are recommended for Interline 850

Temperature	Schedule 1	Schedule 2
50°F (10°C)	7 days	14 days
59°F (15°C)	4 days	10 days
77°F (25°C)	2 days	6 days
95°F (35°C)	36 hours	4 days
104°F (40°C)	24 hours	3 days

Schedule 1 refers to the minimum cure time at the specified substrate temperature prior to conducting a tank hydrotest or immersion in purely aliphatic petroleum products (e.g diesel or kerosene, however not gasoline or gasoline/alcohol blends).
Schedule 2 refers to the minimum cure time at the specified substrate temperature prior to immersion in all other chemicals as per the chemical resistance list.

These cure schedules do not take into consideration specific curing requirements for third party approvals, such as for potable water use.

For storage of cargoes above ambient temperatures, consult International Protective Coatings for further details.

This material is recommended for the storage of aviation fuel. It is also suitable for storage of unleaded gasoline.
Interline 850 is not suitable for exposure to acidic conditions.
This product has the following specification approvals:

- DEF stan 80-97 for the lining of bulk aviation fuel tanks.
- Spanish Norma INTA 164402-A.
- Norwegian National Institute of Public Health for use in Potable Water Tanks on Offshore Installations.
- Certified to AS/NZS 4020:2005 for tanks greater than 42,000 mm^2/litre. Minimum capacity 6 litres, minimum internal pipe diameter 10 cm.

Consult International Protective Coatings for specific approved specifications.

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 affect VOC values determined using EPA Method 24.

SYSTEMS COMPATIBILITY

Generally, where VOC regulations allow, Interline 850 can be used as a self-priming system. Interline 982 can also be used in certain situations. Consult International Protective Coatings for specific recommendations.

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

Consult International Protective Coatings to confirm that Interline 850 is suitable for contact with the product to be stored.

Interline® 850

Epoxy Phenolic

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 850 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 (Base and Curing Agent 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
20 liter	16 liter	20 liter	4 liter	5 liter
5 US gal	4 US gal	5 US gal	1 US gal	1 US gal

For availability of other pack sizes, contact AkzoNobel.

SHIPPING WEIGHT (TYPICAL)

Unit Size	Part A	Part B
20 liter	29 kg	4.3 kg
5 US gal	60.2 lb	8.6 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

www.international-pc.com