

PRODUCT DESCRIPTION

A one component, general purpose heat resistant paint, based on air drying oleoresinous resins, and pigmented with aluminium flake.

INTENDED USES

As a heat resistant coating for general site use or as an industrial maintenance coating on both ambient and high temperature steelwork up to 315°C (600°F) where an economical aluminium finish is required.

Suitable for all types of operations including refineries, offshore structures, power, petrochemical and chemical plants.

PRACTICAL INFORMATION FOR INTERTHERM 891

| | |
|------------------------------|--|
| Colour | Aluminium |
| Gloss Level | Not Applicable |
| Volume Solids | 48% |
| Typical Thickness | 15-25 microns (0.6-1 mils) dry equivalent to 31-52 microns (1.2-2.1 mils) wet |
| Theoretical Coverage | 19.20 m ² /litre at 25 microns d.f.t and stated volume solids 770 sq.ft/US gallon at 1 mils d.f.t and stated volume solids |
| Practical Coverage | Allow appropriate loss factors |
| Method of Application | Airless Spray, Air Spray, Brush, Roller |

Drying Time

| Temperature | Touch Dry | Hard Dry | Overcoating Interval with recommended topcoats | |
|--------------|-----------|----------|--|-----------------------|
| | | | Minimum | Maximum |
| 5°C (41°F) | 18 hours | 72 hours | 24 hours | Extended ¹ |
| 15°C (59°F) | 12 hours | 36 hours | 24 hours | Extended ¹ |
| 25°C (77°F) | 8 hours | 24 hours | 24 hours | Extended ¹ |
| 40°C (104°F) | 5 hours | 16 hours | 16 hours | Extended ¹ |

¹ See International Protective Coatings Definitions and Abbreviations

REGULATORY DATA

| | | |
|-----------------------|-----------------------------------|---|
| Flash Point | 43°C (109°F) | |
| Product Weight | 1.00 kg/l (8.3 lb/gal) | |
| VOC | 3.50 lb/gal (420 g/l) 456 g/kg | EPA Method 24 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.

Primed Surfaces

Intertherm 891 can be applied over approved anti-corrosive primers. The primer surface should be dry and free from all contamination and Intertherm 891 must be applied within the overcoating intervals specified (consult the relevant product data sheet).

Areas of breakdown, damage etc., should be prepared to the specified standard (e.g. Sa2½ (ISO 8501-1:2007) or SSPC-SP10 Abrasive Blasting, or SSPC-SP11, Power Tool Cleaning) and patch primed prior to the application of Intertherm 891.

Metallic Zinc Primed Surfaces

Intertherm 891 is suitable for application to steelwork freshly coated with zinc silicate shop primers.

If the zinc shop primer shows extensive or widely scattered breakdown, or excessive zinc corrosion products, overall sweep blasting will be necessary. Other types of shop primer are not suitable for overcoating and will require complete removal by abrasive blast cleaning.

Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPC-SP10.

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 | Recommended | Tip Range 0.33-0.41 mm (13-16 thou) Total output fluid pressure at spray tip not less than 112 kg/cm ² (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 15-25 microns (0.6-1.0 mils) can be achieved | |
| Roller | Suitable - small areas only | Typically 15-25 microns (0.6-1.0 mils) can be achieved | |
| Thinner | International GTA004 | Do not thin | |
| Cleaner | International GTA004 | | |
| Work Stoppages | Thoroughly flush all equipment with International GTA004. All unused material should be stored in tightly closed containers. Partially filled containers may show surface skinning and/or a viscosity increase of the material after storage. Material should be filtered prior to use. | | |
| Clean Up | Clean all equipment immediately after use with GTA004. 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 presence of leafing aluminium in this formulation, whilst imparting heat and corrosion resistance, can also retard access to atmospheric oxygen. As this is an air drying system curing by atmospheric oxidation, over-application will severely retard through curing.

For maximum temperature resistance it is best to specify 15 microns (0.5 mils) DFT as the volatile nature of heat sensitive organic materials will cause film defects in thicker films, including blistering.

Over-application of Intertherm 891 will extend both the minimum overcoating periods and handling times, and may be detrimental to long term overcoating properties.

Over-application of Intertherm 891 will lead to blistering at high temperatures.

Level of sheen and surface finish are dependent on application method. Avoid using a mixture of application methods whenever possible.

For maximum corrosion resistance a zinc silicate primer should be used. A mist coat may be required to prevent pinholing. It is preferable to overcoat the zinc silicate before weathering but in cases where this is not possible then the zinc silicate surface should be clean and free from zinc salts.

When using Intertherm 891 over inorganic zinc primer, the products should be applied in strict accordance with film thickness specifications, since application of excessive thicknesses may cause blistering. Determine that the inorganic zinc primer is thoroughly cured prior to application of the Intertherm 891 by following the curing instructions given on the relevant product data sheet.

Alternatively, Interzinc 890 zinc dust graphite primer may be specified. However, this product does not possess the ultimate corrosion resistance of zinc silicates, but is capable of tolerating lower degrees of surface preparation which may prevail in maintenance solutions

Maximum continuous dry temperature resistance for Intertherm 891 is 315°C (600°F). For temperatures greater than 315°C (600°F) Intertherm 50 should be used.

Intertherm 891 is not suitable for exposure to acid or alkaline environments.

Intertherm 891 is not designed for continuous water immersion.

When used as a general purpose aluminium paint Intertherm 891 can be used to overcoat all tightly adherent, clean old alkyd 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 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

Recommended priming system for dry temperatures up to 100°C (212°F) (continuous):

Interprime 198

Recommended priming system for dry temperatures up to 315°C (600°F) (continuous):

Intertherm 890
Interzinc 12
Interzinc 22
Interzinc 250

For other suitable primers, consult International Protective Coatings.

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 |
|--|------------|--|----------|
| | 5 litre | 5 litre | 5 litre |
| | 20 litre | 20 litre | 20 litre |
| For availability of other pack sizes, contact International Protective Coatings. | | | |
| SHIPPING WEIGHT | Unit Size | | |
| | 5 litre | 5.3 kg | |
| | 20 litre | 21.3 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 International Paint representative that this data sheet is current prior to using the product.

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