

Heat Resistant Cold Spray Aluminium

PRODUCT DESCRIPTION A two component, metallic flake pigmented, innovative high performance coating system, based on titanium modified copolymer technology, specifically designed to provide a combination of temperature and corrosion resistance.

INTENDED USES Ideally suited as a new pipe fabrication coating system, where significant volumes of insulated and uninsulated pipes can be coated with a single coating specification.

For the corrosion protection of the varying grades of carbon and austenitic stainless steel piping exposed to continuous operating temperatures -165°C (-265°F) to 565°C (1050°F).

PRACTICAL INFORMATION FOR INTERTHERM 898CSA

Colour	Metallic
Gloss Level	Matt
Volume Solids	64%
Typical Thickness	175 microns (7 mils) dry equivalent to 273 microns (10.9 mils) wet
Theoretical Coverage	2.86m ² / kg at 175 microns dry film thickness and stated volume solids 14 ft ² / lb at 7 mils dry film thickness and stated volume solids
Practical Coverage	Allow appropriate loss factors
Method of Application	Air Spray, Airless Spray
Drying Time	

Overcoating interval with self

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
10°C (50°F)	90 minutes	16 hours ¹	24 hours	7 days
15°C (59°F)	60 minutes	9 hours ¹	16 hours	7 days
25°C (77°F)	30 minutes	7 hours ¹	12 hours	7 days
40°C (104°F)	15 minutes	6 hours ¹	10 hours	7 days

¹ Sufficient coating film strength has developed to permit the handling and movement of coated steelwork.

When overcoating Intertherm 898CSA, contact International Protective Coatings for further advice.

REGULATORY DATA

Flash Point (Typical) Part A 32°C (90°F); Part B 22°C (72°F); Mixed 25°C (77°F)

Product Weight 1.28 kg/l (10.7 lb/gal)

VOC 3.50 lb/gal (420 g/l)
332 g/kg
EPA Method 24
EU Solvent Emissions Directive
(Council Directive 1999/13/EC)

See Product Characteristics section for further details

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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.

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 Intertherm 898CSA, 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 50 microns (2 mils) is recommended.

Austenitic Stainless Steel

Ensure surface is clean, dry and free from metal corrosion products prior to application. Light sweep with nonmetallic and chloride free abrasive (e.g. aluminium oxide or garnet) to obtain anchor profile of approximately 50 microns (2 mils).

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	71 part(s) : 1 part(s) by weight			
Working Pot Life	10°C (50°F) 2 hours	15°C (59°F) 1.5 hours	25°C (77°F) 75 minutes	40°C (104°F) 50 minutes
Airless Spray	Suitable	Tip Range 0.38-0.48 mm (15-19 thou) Total output fluid pressure at spray tip not less than 141 kg/cm² (2005 p.s.i.)		
Air Spray (Pressure Pot)	Recommended	Gun Air Cap Fluid Tip	DeVilbiss MBC or JGA 704 or 765 E	
Air Spray (Conventional)	Recommended	Use suitable proprietary equipment		
Brush	Suitable - small areas only	Typically 60 microns (2.4 mils) can be achieved		
Roller	Suitable - small areas only	Typically 60 microns (2.4 mils) can be achieved		
Thinner	International GTA007	Do not thin more than allowed by local environmental legislation.		
Cleaner	International GTA007			
Work Stoppages	Do not allow material to remain in hoses, gun or spray equipment. Thoroughly flush all equipment with International GTA007. Once units of material 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 GTA007. 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

The detailed Intertherm 898CSA Application Guidelines should be consulted prior to use.

Intertherm 898CSA is recommended for the protection of new construction line pipe operating at continuous temperatures of between -165°C (-265°F) and 565°C (1050°F).

Intertherm 898CSA is typically applied directly to correctly prepared steelwork as a single coat system at 175 microns (7 mils) dry film thickness.

Intertherm 898CSA provides temperature and corrosion resistance during short term temperature spikes which occur during steam-out and regeneration processes.

Intertherm 898CSA maintains corrosion resistance during operational plant shutdown periods of up to 28 days; please contact International Protective Coatings for further information.

Intertherm 898CSA reacts with atmospheric moisture, and as such when in the can should remain covered at all times. Failure to keep the tin covered will result in skinning of unused material and loss of pot life.

When applying Intertherm 898CSA in confined spaces ensure adequate ventilation.

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

In common with many products containing leafing aluminium pigmentation Intertherm 898CSA may be prone to developing a “polished” appearance in areas of minor mechanical damages etc. However, this phenomenon is merely aesthetic and is not detrimental to the anti-corrosive performance of the product.

Note: VOC values quoted are based on maximum possible for the product taking into account variations due to colour differences 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

Intertherm 898CSA will normally be applied direct to metal and is not normally overcoated with any product other than itself when used under thermal insulation.

Overcoating of Intertherm 898CSA for pipe marking purposes may be possible. Please consult International Protective Coatings for the latest technical 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
- Intertherm 898CSA 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 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	
		Weight	Pack	Weight	Pack
	20 kg	19.72 kg	20 kg	0.28 kg	0.5 kg
	50 lb	49 lb	50 lb	0.7 lb	1 lb
For availability of other pack sizes, contact International Protective Coatings.					
SHIPPING WEIGHT (TYPICAL)	Unit Size	Part A		Part B	
		Weight	Pack	Weight	Pack
	20 kg	21.47 kg		0.38 kg	
	50 lb	51.7 lb		1.2 lb	
STORAGE	Shelf Life	12 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 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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