# **%International**

# IMO Resolution MSC.215 (82) compliant Ballast Tank Coating

Colour

System Film Thickness

PRODUCT DESCRIPTION

A light coloured, solvent free, tar free epoxy tank coating.

INTENDED USES

As a high performance tank coating which may be used in ballast tanks.

Is type approved as complying with the requirements of IMO Resolution MSC.215 (82) for use on newbuildings.

PRODUCT INFORMATION

THA645-Grey, First Coat THA646-Buff, Second Coat

Note: These may be reversed

2 coats at 175 microns dry (184 microns wet) per coat

Part B (Curing Agent) THA647

Volume Solids 95% ±2% (ISO 3233:1998)

Mix Ratio 4 volume(s) Part A to 1 volume(s) Part B

Specific Gravity Base (Part A) 1.526-1.575

Curing Agent (Part B) 0.923-0.951

Mixed Paint 1.41-1.45

**Theoretical Coverage** 5.43 m²/litre at 175 microns dft, allow appropriate loss factors

Method of Application Airless Spray, Brush, Plural Feed Airless Spray, Roller

Flash Point (Typical) Part A 83°C; Part B 110°C; Mixed 83°C

Drying Information	10°C	15°C	25°C	35°C
Touch Dry [ISO 9117/3:2010]	18 hrs	12 hrs	5 hrs	3 hrs
Hard Dry [ISO 9117-1:2009]	40 hrs	30 hrs	16 hrs	6 hrs
Walk-on Time	40 hrs	30 hrs	18 hrs	8 hrs
Pot Life			30 mins	15 mins
Minimum time before ballasting	14 days	11 days	7 days	5 days

### Overcoating Data - see limitations Substrate Temperature

	10		15°C		25°C		35°C	
Overcoated By	Min	Max	Min	Max	Min	Max	Min	Max
Interline 644 Full coat over full coat	40 hrs	14 days	30 hrs	14 days	18 hrs	14 days	8 hrs	14 days
Interline 644 Full coat over stripe coat	12 hrs	14 days	9 hrs	14 days	6 hrs	14 days	3 hrs	14 days

**REGULATORY DATA** 

VOC 98 g/lt as supplied (EPA Method 24)

110 g/kg of liquid paint as supplied. EU Solvent Emissions Directive (Council

Directive 1999/13/EC)

**Note:** VOC values are typical and are provided for guidance purposes only. These may be subject to variation depending on factors such as differences in colour and normal manufacturing tolerances.

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### SURFACE PREPARATIONS

Use in accordance with the standard Worldwide Marine Specifications. Where necessary, remove weld, spatter, smooth weld seams and remove sharp edges by rounding to a minimum radius of 2mm or subjecting to a "three pass" grinding technique.

### Cleanliness

All surfaces to be coated must be clean, dry and free from contamination. High pressure fresh water wash or fresh water wash, as appropriate, and remove all oil, grease, soluble contaminants and other foreign matter in accordance with SSPC-SP1: solvent cleaning.

Residual dust levels prior to paint application must not exceed rating "1" for dust size classes "3", "4" or "5" (ISO 8502-3:1993).

Residual soluble salt levels prior to coating application must not exceed 50mg/m² as extracted and measured in accordance with ISO 8502-6 (1995) and ISO 8502-9 (1998) respectively.

### **Shop Primers**

For ballast tank applications covered by PSPC MSC 215 (82), Interline 644 is not approved for use over intact shop primers, which must be completely removed by abrasive blasting to Sa2½ (ISO 8501-1:2007). In some cases abrasive blasting to Sa2 (ISO 8501-1:2007), removing at least 70% of the intact primer, may be acceptable. (Consult International Paint for advice on specific shop primers). However, where this applied, block construction welds, areas of corrosion and shop primer damage must be abrasive blasted to Sa2½ (ISO 8501-1:2007).

The surface profile on any areas where abrasive blasting has been carried out must lie in the range 30-75 microns (ISO 8503-1/2:1988).

#### After Erection

Erection joint welds and adjacent areas must be abrasive blasted to Sa2½ (ISO 8501-1:2007) or power tooled to St3 (ISO 8501-1:2007). Where power tool preparation is used, and in order to ensure satisfactory adhesion of the Interline 644 system, care must be taken to avoid "polishing" the welds and surrounding areas. Small damages, up to 2% of the total area, may be prepared by power tooling to St3 (ISO 8503-1/2:1988). Contiguous damages over 25m², or over 2% of the total tank surface area must be abrasive blasted to Sa2½ (ISO 8501-1:2007).

### MIXING OF PRODUCT PRIOR TO APPLICATION

### Single feed airless spray

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) The temperature of Part A and Part B prior to mixing should be 25°C. Higher component temperatures will reduce the working pot life of product. If the temperature of the two components exceeds 30°C then it is recommended that plural component airless spray equipment is used.
- (2) Agitate Base (Part A) with a power agitator
- (3) Agitate Curing Agent (Part B) with a power agitator
- (4) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with a power agitator.
- (5) Use promptly and within the pot life specified

### Plural feed airless spray

- (1) Base (Part A) and Curing Agent (Part B) are not mixed before application
- (2) Base (Part A) to be circulated through the spray unit, heating with in-line heaters, until it has reached 30°C
- (3) Curing Agent (Part B) to remain at ambient temperature

### NOTE

For use in Marine situations in North America, the following surface preparation standards can be used: SSPC-SP10 in place of Sa2½ (ISO 8501-1:2007) SSPC-SP6 in place of Sa2 (ISO 8501-1:2007) SSPC-SP3 or SSPC-SP11 in place of St3 (ISO 8501-1:2007)



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**APPLICATION** 

**Mixing** For information on mixing see page 2.

Thinner Do not thin.

Airless Spray Single feed airless spray

Tip Range 0.38-0.53 mm (15-21 thou)

Total output fluid pressure at spray tip not less than 352 kg/cm² (5010 p.s.i.)

Pump Ratio 70:1

It is recommended that an in-line heater is installed as close to the pump fluid outlet as possible. This will allow the operator to use heat to improve flow of material through long paint hoses. The heater should be set to achieve a

paint temperature at the gun of 28-32°C. Do not have the in-line heater set too high.

It is recommended that the hose length is kept to a minimum and should not exceed 150ft. Best results are

obtained with 3/8" ID paint hose and 1/4" ID whip end.

Plural feed airless spray

Tip range 0.38 - 0.53 mm (15-21 thou)

Total output fluid pressure at spray tip not less than 246 kg/cm² (3500 p.s.i.) Part A to be circulated through spray unit, using in-line heater, to heat to 30°C.

Part B to remain at ambient temperature.

Mixed paint line to be kept as short as possible.

When using plural feed spray equipment it is important to ensure an adequate supply of both components to the main proportioning unit. If feeder pumps are employed, they should be carefully set in order to maintain the supply of Part A and Part B and to prevent cavitation in the feeder hoses. Failure to do this will result in an incorrect mix ratio. Correct proportioning should always be checked using the method recommended by the

equipment supplier.

Brush Application by brush is recommended for small areas only. Multiple coats may be required to achieve specified film

thickness.

Roller Application by roller is recommended for small areas only. Multiple coats may be required to achieve specified film

thickness.

Brush and roller are not suitable for application of full coats. Airless spray should be used for the latter.

Stripe Coats Stripe coats should be applied by brush or roller as appropriate for the area concerned and must be applied as a

coherent film.

Cleaner International GTA822

Work Stoppages and Cleanup 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 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. Do not exceed pot life limitations.

All surplus materials and empty containers should be disposed of in accordance with appropriate regional

regulations/legislation.

**Ventilation** After application of the final coat of the system, ventilation should be continued for a minimum period of 48 hours

unless otherwise agreed by International Paint.

Welding 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. In North America do so in accordance with instruction in ANSI/ASC Z49.1 "Safety in Welding and

Cutting.'

SAFETY 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.

Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read and follow all precautionary notices on the Material Safety Data Sheet and container labels. If you do not fully understand these warnings and instructions or if you can not strictly comply with them, do not use this product. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapour concentrations within safe limits and to protect against toxic or oxygen deficient hazards. Take precautions to avoid skin and eye contact (ie. gloves, goggles, face masks, barrier creams etc.) Actual safety measures are dependant on application methods

and work environment.
EMERGENCY CONTACT NUMBERS:

USA/Canada - Medical Advisory Number 1-800-854-6813

Europe - Contact (44) 191 4696111. For advice to Doctors & Hospitals only contact (44) 207 6359191

R.O.W. - Contact Regional Office



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LIMITATIONS

At ambient temperatures below 25°C paint lines must be lagged. This product will not cure adequately below 10°C.

#### Film Thickness

Minimum Film Thickness: The specified scheme dry film thickness of 350 microns must be achieved on at least 90% of the total coated surface area. A minimum dry film thickness, equivalent to 90% of that specified, must be achieved on the remaining 10%.

<u>Maximum Film Thickness</u>: Dry film thicknesses should be kept below 1050 microns where practical (i.e. three times the specified system thickness). Where excessive overlapping is unavoidable on e.g. corners, or where erection joint line coating is overlapped onto coating applied at the block coating stage, occasional thicknesses up to 2000 microns may be expected. International Paint must be consulted when other than a small number of film thickness readings fall outside of this range.

### **Environmental Factors**

Overcoating information is given for guidance only and is subject to regional variation depending upon local climate and environmental conditions. Consult your local International Paint representative for specific recommendations. Apply in good weather. Temperature of the surface to be coated must be at least 3°C above the dew point and the relative humidity must not exceed 85%. For optimum application properties bring the material to 25-25°C, unless specifically instructed otherwise, prior to mixing and application. At the time of application paint, substrate and air temperatures must be between 10°C and 40°C. Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE Section of this data sheet. Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures. Test performance results were obtained in a controlled laboratory environment and International Paint makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection, verification of performance and use of the coating.

UNIT SIZE	Unit Size 20 It	Part A Vol 16 lt	Pack 20 lt	Part Vol 4 It	B Pack 5 It			
For availability of other unit sizes consult International Paint								
UNIT SHIPPING WEIGHT (TYPICAL)	Unit Size 20 It	Unit W 30.8	Ŭ					
STORAGE	Shelf Life	Part A - 12 mo result in poor s Part B - 12 mo	spray propertie		ong periods a	t temperatures	greater than 25	s°C may
PLACE OF	United Kingdom							

## IMPORTANT NOTE

MANUFACTURE

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.

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