

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

**PRODUCT DESCRIPTION** A light coloured, aluminium pure epoxy universal primer with good corrosion protection, abrasion resistance and low temperature application capability.

**INTENDED USES** A universal primer which may be used as a ballast tank coating and can be applied directly to mechanically prepared shop primer. Suitable for use with controlled cathodic protection.  
Is type approved as complying with the requirements of IMO Resolution MSC.215 (82) for use on newbuildings.

**PRODUCT INFORMATION**

<b>Colour</b>	KNA340-Bronze KNA341-Light Red KNA342-Grey Note: Any colour may be used as first or second coat
<b>System Film Thickness</b>	2 coats at 160 microns dry (235 microns wet) per coat
<b>Part B (Curing Agent)</b>	KNA343
<b>Volume Solids</b>	68% ±2% (ISO 3233:1998)
<b>Mix Ratio</b>	3 volume(s) Part A to 1 volume(s) Part B
<b>Specific Gravity</b>	Base (Part A) 1.36-1.41 Curing Agent (Part B) 0.93-0.97 Mixed Paint 1.26-1.31
<b>Theoretical Coverage</b>	4.25 m <sup>2</sup> /litre at 160 microns dft, allow appropriate loss factors
<b>Method of Application</b>	Airless Spray, Brush, Roller
<b>Flash Point (Typical)</b>	Part A 29°C; Part B 27°C; Mixed 30°C

<b>Drying Information</b>	-5°C	5°C	25°C	35°C
Touch Dry [ISO 9117/3:2010]	12 hrs	9 hrs	2 hrs	30 mins
Hard Dry [ISO 9117-1:2009]	24 hrs	14 hrs	6 hrs	4 hrs
Walk-on Time	24 hrs	14 hrs	6 hrs	4 hrs
Pot Life	9 hrs	7 hrs	4 hrs	90 mins
Minimum time before ballasting	7 days	5 days	3 days	2 days

**Note** **Drying times can vary depending on ventilation conditions and film thickness applied. Time before ballasting refers to full coats. For touch up repairs, these times may be reduced. Consult International Paint.**

<b>Overcoating Data - see limitations</b>	<b>Substrate Temperature</b>							
	-5°C		5°C		25°C		35°C	
	Min	Max	Min	Max	Min	Max	Min	Max
Intergard 343 Full coat over full coat	24 hrs	14 days	14 hrs	14 days	6 hrs	14 days	4 hrs	14 days
Intergard 343 Full coat over stripe coat	3 hrs	14 days	3 hrs	14 days	3 hrs	14 days	3 hrs	14 days

**REGULATORY DATA** **VOC** 293 g/lit as supplied (EPA Method 24)  
298 g/lit Chinese National Standard GB23985

**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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### CERTIFICATION

- IMO PSPC Resolution MSC.215 (82) - Det Norske Veritas (DNV)
- IMO PSPC Resolution MSC.215 (82) - Lloyds Register (LR)
- IMO PSPC Resolution MSC.215 (82) - American Bureau of Shipping (ABS)
- IMO PSPC Resolution MSC.215 (82) - Registro Italiano Navale (RINA)
- IMO PSPC Resolution MSC.215 (82) - Bureau Veritas (BV)

### Shop Primers

Intergard 343 is certified for use over the following International Paint Shop Primers:

- Interplate 317
- Interplate 997

International Paint should be consulted regarding certification status of Intergard 343 applied over shop primers supplied by other paint manufacturers.

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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/m<sup>2</sup> as extracted and measured in accordance with ISO 8502-6 (1995) and ISO 8502-9 (1998) respectively.

#### Shop Primers

Approved shop primers, compatible with Intergard 343, must be applied in accordance with PSPC MSC.215(2006) to a minimum standard of Sa2½ (ISO 8501-1:2007) and over a blast profile of 30-75 (ISO 8503-1/2:1988). (Refer to the relevant shop primer product data sheet for full details).

Intact shop primer may be retained, and shall be cleaned by sweep abrasive blasting or high pressure fresh water washing. Block construction welds, areas of corrosion and damages to the shop primer must be abrasive blasted to Sa2½ (ISO 8501-1:2007).

Non approved shop primers 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 applies, 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 Intergard 343 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 25m<sup>2</sup>, or over 2% of the total tank surface area must be abrasive blasted to Sa2½ (ISO 8501-1:2007).

#### 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)**

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### APPLICATION

<b>Mixing</b>	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 power agitator. (2) Combine entire contents of Curing Agent (Part B) with Base (Part A) and mix thoroughly with power agitator.
<b>Thinner</b>	International GTA220. 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.
<b>Airless Spray</b>	Recommended Tip Range 0.66-0.79 mm (26-31 thou) Total output fluid pressure at spray tip not less than 211 kg/cm <sup>2</sup> (3000 p.s.i.)
<b>Brush</b>	Application by brush is recommended for small areas only. Multiple coats may be required to achieve specified film thickness.
<b>Roller</b>	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.
<b>Stripe Coats</b>	Stripe coats should be applied by brush or roller as appropriate for the area concerned and must be applied as a coherent film.
<b>Cleaner</b>	International GTA822
<b>Work Stoppages and Cleanup</b>	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.
<b>Ventilation</b>	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.
<b>Welding</b>	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**

**China – Contact (86) 532 83889090**

**R.O.W. - Contact Regional Office**

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### LIMITATIONS

Intergard 343 should be high pressure fresh water washed and/or solvent washed prior to overcoating, where necessary, to ensure removal of any surface contamination that has accumulated.

### Film Thickness

**Nominal Dry Film Thickness (NDFT):** The specified scheme dry film thickness of 320 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%.

**Minimum Film Thickness :** The specified scheme dry film thickness of 320 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%.

**Maximum Film Thickness :** Dry film thicknesses should be kept below 960 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 21-27°C, unless specifically instructed otherwise, prior to mixing and application. 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	Part A		Part B	
		Vol	Pack	Vol	Pack
	15 lt	11.25 lt	18 lt	3.75 lt	4 lt
	20 lt	15 lt	20 lt	5 lt	5 lt

For availability of other unit sizes consult International Paint

UNIT SHIPPING WEIGHT (TYPICAL)	Unit Size	Unit Weight
	15 lt	19.1 Kg
	20 lt	27.4 Kg

STORAGE	Shelf Life	12 months at 25°C. Subject to re-inspection thereafter. Store in dry, shaded conditions away from sources of heat and ignition.
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PLACE OF MANUFACTURE	Peoples Republic of China, Singapore, Vietnam. Selection from this list as appropriate.
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**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](http://www.international-marine.com) or [www.international-pc.com](http://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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