

# Pyrotec HR500™

|  |   |  |   |
|--|---|--|---|
| Extreme Heat Resistant Powder Coating  |   |  |   |
| <b>Product Code:</b>   |   | 939 Line   |   |
| <b>Description</b>   |   |  |   |
| <p>Pyrotec HR500™ is a heat resistant powder coating designed for applications requiring service temperatures up to 500°C, while maintaining physical integrity. Extremes of heat will alter the gloss and colour of these coatings according to the temperature to which the coating is subjected.</p> <p>Pyrotec HR500™ exhibits decorative and durability characteristics suitable for internal use and external product applications combined with excellent overall performance.</p> <p>Pyrotec HR500™ needs to be applied only to shot-blasted or sand-blasted surfaces. Applying to non blasted surfaces may lead to inadequate adhesion.</p> |   |  |   |
| <b>Features</b>  |   | <b>Benefits</b>                                  |   |
| Extreme heat resistance  |   | Designed for service temperatures of up to 500°C |   |
| Film integrity   |   | Long intact life of coating                      |   |
| Tough polyester blend  |   | Hard wearing/serviceable finish                  |   |
| No solvents or emissions   |   | Less waste and pollution to the environment      |   |
| <b>Uses</b>  |   |  |   |
| <p>Pyrotec HR500™ has a multitude of uses over shot blasted mild steel. Examples include: barbecues and barbecue fittings, wood stoves, commercial lighting fixtures and automotive components. Because of the unique nature of Pyrotec HR500™, it is important that you check with your Dulux Powder Coatings Representative to determine the suitability of the product for its intended use.</p>  |   |  |   |
| <b>Performance Guide</b>   |   |  |   |
| <b>Weather</b>   | Good resistance to weathering. Suitable for outdoor applications. | <b>Salt Spray</b>                                | Shot blasted mild steel to Class 2.5 (250 hours ASTM B117).                         |
| <b>Heat</b>  | Excellent resistance to 500°C.                                    | <b>Humidity</b>                                  | Resistant to 38°C/100% humidity for 250 hours on shot blasted mild steel Class 2.5. |
| <b>Acid</b>  | Resistant to spills of dilute acid. Avoid contact.                | <b>Abrasion</b>                                  | Very good resistance to abrasion.   |
| <b>Alkali</b>  | Resistant to spills of dilute alkali. Avoid contact.              | <b>Pencil Hardness</b>                           | 2H  |
|  |   | <b>Knoops Hardness</b>                           | Average 15  |
| <b>Flexibility</b>   | Pass < 0.25 mandrel   | <b>Cross Hatch Adhesion</b>                      | No removal  |
| <b>Chemical Resistance</b>   |   |  |   |
| <b>Ethyl Acetate</b>   | Softens/avoid contact   | <b>White Spirits</b>                             | Resistant   |
| <b>Ethanol</b>   | Resistant   | <b>Xylene</b>                                    | Slight softening/limit contact  |
| <b>Methyl Ethyl Ketone</b>   | Softens/avoid contact   |  |   |

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| <b>Product Guide</b>   |  |                         |   |
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| <b>Colour</b>  | Limited range. Refer to your Dulux Powder Coatings Representative.   | <b>Specific gravity</b> | 1.3 – 1.7 @ colour                              |
| <b>Gloss Level</b>   | 3 – 15% at 60°   | <b>Shelf life</b>       | 12 months when stored below 25°C/dry conditions |
| <b>Application Data</b>  |  |                         |   |
| <b>Application Method</b>  | Electrostatic spray.   |                         |   |
| <b>Clean Up</b>  | Dust or vacuum loose powder. Avoid use of compressed air.  |                         |   |
| <b>Cure Schedule</b>   | <b>Metal Temperature (°C)</b>  | <b>Time (minutes)</b>   |   |
|  | 200  | 20                      |   |
| <b>Cured Film Thickness</b>  | Recommended:   | 60 µm                   |   |
|  | Range:   | 40 – 80 µm              |   |
| <b>Theoretical spreading rate at recommended film thickness</b>  |  |                         |   |
| A spreading rate of 15 m <sup>2</sup> /kg corresponds to 65µm cured film thickness assuming no loss. Practical spreading rates will vary due to such factors as method and conditions of application and surface profile and texture.  |  |                         |   |
| <b>Application Guide</b>   |  |                         |   |
| <b>Surface Preparation</b>   |  |                         |   |
| <ul style="list-style-type: none"> <li>Surfaces should be degreased and free from any oxides, mill scale, greases and lubricants for optimal performance.</li> <li>Substrates should be grit blasted with angular grit to SA 2.5 finish.</li> <li>To avoid “flash rusting”, ferrous metal should be pre-treated immediately with Zinc Phosphate or Iron Phosphate (refer BS6497 and/or AS/NZ4506).</li> </ul>              |  |                         |   |
| <b>Application Procedure and Equipment</b>   |  |                         |   |
| 1a)  | For fluidised bed, ensure uniform fluidisation of powder. Fluidised powder should resemble “simmering liquid”. Aged or compacted powder may require pre-conditioning for several minutes to fluidise evenly.                             |                         |   |
| 1b)  | For box feeders, ensure probe is fully inserted in powder and operated as per manufacturer’s recommendations.  |                         |   |
| 2.   | Apply by electrostatic spray.  |                         |   |
| 3.   | Cure as per recommendations outlined above.  |                         |   |
| 4.   | Test for cure of the coating by contact with a drop of Corsol PGMA (available from Dulux Powder Coatings) for 30 seconds. Surface should be wiped dry and immediately checked for softening. Only slight surface softening should occur. |                         |   |
| <b>Care and Maintenance</b>  |  |                         |   |
| As a general rule, cleaning of externally located powder coating surfaces must take place every six months. Where salts/pollutants are more prevalent such as seaside and industrial areas, a cleaning program should be carried out more frequently.  |  |                         |   |
| <b>THREE STEPS TO CLEANING POWDER COATED SURFACES</b>  |  |                         |   |
| <ol style="list-style-type: none"> <li>Remove loose deposits with a wet sponge (avoid scratching the surface by dry dusting).</li> <li>Using a soft clean cloth and a mild detergent in warm water, clean the powder coating to remove dust, salt or other deposits.</li> <li>Always rinse after cleaning with fresh water to remove any remaining detergent.</li> </ol>   |  |                         |   |
| <b>WARNING:</b> In some cases, strong solvents recommended for thinning various types of paints and also for cleaning up mastics/sealants are harmful to the extended life of the powder coated surface. These solvents should not be used for cleaning purposes. If paint splashes or sealants/mastics need to be removed then the following solvents can be used safely: Methylated Spirits, Ethyl Alcohol, Isopropanol. |  |                         |   |

# Pyrotec HR350™/Pyrotec HR500™

| <b>Health and Safety</b>   |   |                                    |               |
|--|---|------------------------------------|---------------|
| <p>The MSDS is an integral part of using this product as it contains information on the potential health effect of exposure, personal protective equipment needed and other relevant SH&amp;E information.</p> <p>For detailed information, refer to product label and the current Chemical Data Sheet (21854) available through Sales and Customer Service Offices.</p>   |   |                                    |               |
| Phone: Australia:-   | 13 24 99  | New Zealand:-                      | 64 9 441 8244 |
| <b>Precautions and Limitations</b>   |   |                                    |               |
| <ul style="list-style-type: none"> <li>As a result of possible wide application variations and stoving conditions, some products and colours may show variation between Dulux Powder Coatings prepared samples and production applied material. Therefore, it is the applicator and/or their customer's responsibility to ensure the product conforms to their requirements.</li> <li>For optimum performance ensure recommended dry film thickness is obtained.</li> <li>Not recommended for use in highly corrosive environments such as severe marine or industrial locations.</li> </ul>   |   |                                    |               |
| <b>Transport and Storage</b>   |   |                                    |               |
| <b>Sizes:</b>  | 20 kg   | <b>Flashpoint:</b>                 | N/A           |
| <b>Weight:</b>   | 20 kg   | <b>UN:</b>                         | N/A           |
| <b>Dangerous Goods Class:</b>  | N/A   | <b>Package Group:</b>              | N/A           |
| <b>Shipment Name:</b>  | Not dangerous goods. No special transport requirements. |                                    |               |
|  |   |                                    |               |
|  |   |                                    |               |
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