### Technical Data Sheet



# WO1800H FREIOTHERM-Hydro-Coating

#### **Product description**

| Product technology    | water-thinnable baking coating               |
|-----------------------|--|
| Application area      | e.g. in the construction and sanitary sector |
| Application           | for exterior use                             |
| Mechanical resistance | good hardness and elasticity                 |
| Substrate             | Non-ferrous metals, Steel                    |

#### General product properties

| Binder-Base             | Combination of acrylate/polyester/amino resin   |  |                               |
|-------------------------|---|--|-------------------------------|
| Colour                  | All common colour shades  |  |                               |
| Gloss value             | satin mat   | 30-60 GU, angle 60°  | DIN EN ISO 2813               |
| Viscosity               | Flow time 16-20 sec. 4 mm flow cup  |  | DIN 53211                     |
| pH-Value                | 8,3-8,7   |  | DIN 19260                     |
| Solid mass              | 37-44 %   |  | theoretical                   |
| Solid content in volume | 27-31 %   |  | theoretical                   |
| Reference product       | The values given refer to the product with the shade WO1800HRA905.  |  |                               |
| Resistance to storage   | approx. 9 month in original packagings at an ambient temperature of 5 to 25 °C. Protect from frost. Open packages are to be used within a short time. |  |                               |
|                         | does not necessarily become   | ty of each batch is stated on th<br>e unusable if stored for longer t<br>an inspection of these materia<br>intended application. | han this period. However, for |

#### Application and processing

| Pretreatment             | The substrate must be free of adhesion-impairing substances such as oil, grease, rust, scale, mill scale, wax and release agent residues. We recommend the use of suitable mechanical pre-treatment processes (e.g. blasting, grinding) or chemical pre-treatment processes (e.g. phosphating) according to the requirements. |  |
|--------------------------|---|--|
| Structure recommendation | Substrate   | On bare steel plate                      |
|                          | Top coat  | WO1800HRA905<br>Dry film thickness 30 μm |

Our technical data sheets are to provide you with advice based on our latest state of knowledge. This guidance does not release you from your own obligation to test our products for their suitability for your intended purposes and applications.

The sale of our products is in accordance with our terms of business, delivery and payment.

DIN EN ISO 9001 | IATF 16949 | EMAS

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| Note before use       | Prior to use, stir well or mix components homogeneously (e.g. with fast mixer). To prevent skin formation, over-coat with water.   |  |  |
|-----------------------|--|--|--|
| Thinning              | demineralised water  |  |  |
| Dry film thickness    | must not exceed 40 µm – risk of reaction bubbles.  |  |  |
| Object temperature    | 10-30 °C, minimum +3 °C above dew point temperature  |  |  |
| Processing conditions | Room temperature 18-25 °C<br>Relative humidity 40-60 %   |  |  |
| Immersing             | 16-25 sec. / 4 mm flow cup (DIN 53211)   |  |  |
| Material usage        | without application loss 150-170 g/m² theoretical layer thickness 40 μm  |  |  |
| Curing                | Recommended object temperature 20 min/160 °C   |  |  |
|                       | 180  |  |  |
|                       | 175  |  |  |
|                       | 170  |  |  |
|                       |  |  |  |
|                       | F 165  |  |  |
|                       | 160  |  |  |
|                       | 155  |  |  |
|                       | 150  |  |  |
|                       | 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70<br>t [min]  |  |  |
|                       | Objekt Temperatur in °C<br>Object Temperature in °C <b>160 170</b>   |  |  |
|                       | Haltezeit Minimum in Minuten <b>20 15</b><br>Holding time minimum in minutes   |  |  |
|                       | Haltezeit Maximum in Minuten<br>Holding time maximum in minutes 60 30  |  |  |
| Note on curing        | Coloured area = stoving conditions with good end properties  |  |  |
|                       | The displayed baking conditions are based on results from laboratory tests and therefore merely serve as a guideline when configuring the processing company's coating systems. The processing company is responsible for ensuring that the coating is fully cured. The complete curing of the coating must be checked by means of additional analytical and resistance tests using representative original parts under production conditions. Please do not hesitate to contact us if you require consultation. |  |  |
| Oven drying           | 20 min. / 160 °C - 10 min. / 180 °C (object temperature)   |  |  |

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| Cleaning of equipment        | immediately with water - possibly with addition of 5-10 % by weight EFD cleaning agent 400916, dried-on equipment with org. solvents, e.g. EFD thinner 400424.   |
|------------------------------|--|
| Comments                     |  |
| Work-and<br>Healthprotection | The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous goods, safety data and recommendations concerning Health and Safety at Work and environmental protection can be found in the corresponding safety data sheet.   |
| Test conditions              | All information is based on a standard climate 23/50 DIN EN 23270. All information is based on our product knowledge an experience. We have no direct influence on the application itself. Please do not hesitate to contact us for further information.<br>The information provided here contains reference values and does not constitute a specification. |

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