

**2K-PUR primer coating  
- Electrostatic sprayable -**

■ **FIELDS OF APPLICATION** Protective primer coating for subsequent PUR-based two pack systems for industrial uses such as building machines, mobile cranes, machine building and the like.

■ **PRODUCT PROPERTIES** WIEREGEN-M162R-Primer is a two-pack coating material based on a polyurethane binder with a low-level solvent content. With the use of WIEREGEN-M162R-Primer it may be possible to fulfill the requirements of the 31. BImSchV (VOC-directive).

**Capacities** Together with suitable primer coatings protective coating systems will be obtained with both excellent mechanical resistance properties and stability against aggressive atmosphere, de-icing salt, etc.

■ **TECHNICAL DATA**

|                                  |   |                  |
|----------------------------------|---|------------------|
|                                  | <u>WIEREGEN-M162R-Primer</u>                              | <u>Hardener</u>  |
| <b>Product Number and Colour</b> | M162R-735<br>light grey RAL 7035                          | DX-4B            |
| <b>Mixing ratio</b>              | 16 parts by weight  | 1 part by weight |
| <b>Shelf life</b>                | At least 12 months in original cans at normal temperature |                  |
| <b>Appropriate Thinner</b>       | V-89 or V-562   |                  |

**Theoretical parameters** WIEREGEN-M162R-Primer, M162R-735

| Density<br>(g/mL) | Solid content<br>(weight %)           | VOC-content                         |                                       | Solid content by volume                |         |
|-------------------|---------------------------------------|-------------------------------------|---------------------------------------|--|---------|
|                   |                                       | (weight %)                          | per 10 µm DFT*<br>(g/m <sup>2</sup> ) | (%)                                    | (mL/kg) |
| 1.55              | 75                                    | 25                                  | 6.9                                   | 56                                     | 365     |
| DFT<br>(µm)       | Calculated wet-film<br>thickness (µm) | Consumption<br>(kg/m <sup>2</sup> ) |                                       | Spreading rate<br>(m <sup>2</sup> /kg) |         |
| 80                | 144                                   | 0.220                               |                                       | 4.5                                    |         |

Remarks

- All values are relevant for the mixture in case of two-pack materials
- DFT: Dry film thickness
- All values named are approximate values and relevant for the quality (colour). The values may differ slightly for other colours.

\* baseline for calculation: consumption in g/m<sup>2</sup> at DFT 10 µm

**Notes referring to  
Directive 2004/42/EC  
„Decopaint-Directive“**

| Subcategory as referred to in Annex IIA                 | VOC limit values<br>(Phase II from 2010) | Max. VOC content of the product in its ready for use condition (including the max. amount of diluents as given in "Application methods") |
|---|--|--|
| J ("Two-pack reactive performance coatings")<br>Type SB | 500 g/l                                  | < 500 g/l  |

### Coating systems

|                            |  |
|----------------------------|--|
| <b>Substrate</b>           | Steel  |
| <b>Surface preparation</b> | Blast-cleaning in preparation grade Sa 2 ½ in accordance with DIN EN ISO 12944-4 |
|                            | <b>Product</b>   |
| <b>Primer coating</b>      | WIEREGEN-M162R-Primer  |
| <b>Top coating</b>         | WIEREGEN-M162R or WIEREGEN-M165R   |

The coating system/s named are examples proved in practice which usually can be modified. The choice of coating materials as well as their number and film thickness depends on the stress to be expected, existing specifications and the methods of application.

### ■ INSTRUCTIONS FOR APPLICATION

#### Surface Preparation

Blast-cleaning in accordance with DIN EN ISO 12944-4, surface preparation grade Sa 2 ½.

#### **Processing Temperature (Air and Surface)**

Optimal at 15 to 25 °C, not below 5 °C

#### **Relative Humidity**

max. 80% relative humidity

The surface temperature of the parts to be coated must be at least 3 °C above the dew point of the surrounding air throughout the application. (cf. basic specification for corrosion protection DIN EN ISO 12944-7)

### Comments on processing

#### **Mixing**

Mix with the pre-packed quantity of hardener, preferably with a mechanical stirrer. For serial application we recommend to use a two-pack application system.

### Application methods

| Means of application / parameters   | recommended nominal dry film thickness per working operation | Addition of thinner V-562 |
|---|--|---------------------------|
| Airmix spraying<br>Nozzle diameter 0.28 to 0.33 mm<br>Material pressure 80 to 100 bar<br>Atomiser pressure 1.5 to 2.5 bar | 80 µm  | up to 3 %                 |
| Roller coating / brush application  | 60 µm  | up to 5 %                 |

In case of roller coating / brush application several working operations can be necessary to obtain a uniform layer thickness and appearance. Among other things this depends on the colour, the processing procedures and equipment, the ambient conditions and the geometry of the parts to be coated.

#### Remarks

- The values above are related to a temperature of approximately 20 °C and are recommendations respectively rough guides. In practice it may be necessary to make modifications.

**Cleaning of equipment** Use thinner V-562

**Pot life** 4 to 6 hours (dependent on temperature)

**Drying and curing times**  
Drying stage in accordance  
with DIN 53150  
at 100 µm DFT

| Air temperature                       | + 5 °C      | + 10 °C     | + 20 °C   |
|---------------------------------------|-------------|-------------|-----------|
| Drying stage 1 (dry to touch)         | ≤ 60 min.   | ≤ 45 min.   | ≤ 30 min. |
| Drying stage 3 (tack free)            | 3 - 4 h     | 2 - 3 h     | 1 - 2 h   |
| Drying stage 6 (ready for re-coating) | approx. 8 h | approx. 6 h | 3 - 4 h   |

The curing of WIEREGEN-M162R-Primer can be accelerated by using higher temperatures, e.g. 20 minutes drying at 80 °C (according to DFT 100 µm).

#### ■ SAFETY MEASURES

The relevant data concerning safety measures can be found in the material safety data sheet of this product.

The valid issue of the material safety data sheet is available from our website [www.geholit-wiemer.de](http://www.geholit-wiemer.de).

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This information is subject to modifications due to technical improvements. The latest edition of this information replaces all previous issues.