Sphere of application

Excellent, water-dilutable, 2-component, epoxy-based mica coating, suitable for use as an anti-corrosive top coat under various insulating materials for steel pipeline and installation structures treated with noverox® Universal Rust-Stop in building interiors. Good resistance to chemicals. For extreme exposure to water, moisture and other corrosive media, as well as good temperature resistance.
Application: in insulated piping and systems engineering; e.g. in the interiors of public buildings, food companies, industrial plants, etc.

General description

Binder base: epoxy resin
Pigment base: special pigment and extender
Colour: grey, approx. DB 702
Gloss: matt
Viscosity as delivered: concentrated, ready to brush
Container sizes: 10 kg standard pack (6 kg mica comp. A + 4 kg hydro-hardener)
Appropriate thinner: water (at least potable quality)
Storage: keep cool and dry; frost-sensitive; close container tightly after use

Product properties

noverox® WS is a two-component coating material based on a water-dilutable epoxy resin. The material has little odour, is non-combustible and non-explosive.
Zinc-coated steel components can also be coated directly with noverox® WS after appropriate preparation (see ‘Surface preparation’).
Together with suitable top coats, coatings are obtained with excellent resistance to chemicals, gasoline, oils and aggressive atmospheres.

Processing information

Mixing ratio: 3 : 2 with hardener (parts by weight)
1 : 1 with hardener (parts of volume)
Pot life: 2-3 hours / +20°C (temperature-dependent)
NB: do not use for longer, even if the mixture does not display any apparent change. When this time limit is exceeded the reactivity of noverox® WS is no longer guaranteed.
Substrate: noverox® rust protection film must be dry, clean and dust-free
Application method:
- brushing/rolling: up to 1% water addition
- compressed-air spraying: up to 3-8% water addition
  nozzle 1.5 - 2 mm, atomiser pressure 3 - 4 bar
- airless spraying: up to 3% water addition
  nozzle 0.33-0.48 mm, 40-60° spray angle, pressure 150-250 bar
Coating thickness:
- spraying: 80 my (mean value)
- rolling/brushing: 60 my - 80 my
Spreading power, theoretical: 3.6 – 4.8 m² / kg
Application temperature: +15°C to +25°C; not below 10°C; drying is delayed considerably below +15°C
Drying: non-tack after 2 hours / completely dry after 7 days (20°C)
After-treatment: after 24 hours (20°C; see also drying table)
Cleaning: clean tools with water
Special information: see EC Safety Data Sheet

**Shelf life**
At least 6 months at 20°C in sealed, unopened containers.

**Delay between operations**
Build up of the anti-corrosive system consisting of noverox® Ax Universal Rust-Stop and noverox® WS epoxy coating.
Application on cold water piping under insulation.

**Drying table:**

<table>
<thead>
<tr>
<th></th>
<th>Temperature of object</th>
<th>25°C</th>
<th>20°C</th>
<th>15°C</th>
<th>10°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>noverox® Universal Rust-Stop</td>
<td>40 my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate drying</td>
<td>2 hours</td>
<td>2 hours</td>
<td>6 hours</td>
<td>16 hours</td>
<td></td>
</tr>
<tr>
<td>noverox® Universal Rust-Stop</td>
<td>40 my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate drying</td>
<td>20 hours</td>
<td>24 hours</td>
<td>32 hours</td>
<td>48 hours</td>
<td></td>
</tr>
<tr>
<td>noverox® WS</td>
<td>60-80 my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate drying</td>
<td>24 hours</td>
<td>24 hours</td>
<td>72 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>noverox® WS</td>
<td>40 my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drying to insulation/bonding</td>
<td>200 my</td>
<td>1 day</td>
<td>2 days</td>
<td>3-5 days</td>
<td></td>
</tr>
<tr>
<td>Optimum curing</td>
<td>7 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Technical Datasheet of noverox® Universal Rust-Stop must be complied with.

**Important information on noverox® WS epoxy coating**

- noverox® WS 2-component epoxy coating is a heavy-duty coating developed according to the latest requirements and processes.
- The properties obtainable in coatings produced from noverox® Rust-Stop and noverox® WS 2-component epoxy coating are, however, dependent not only on the type of formulation but also on the care with which the application instructions are followed.

- We therefore draw special attention to the following points here:
  - The hardener must be mixed in very carefully after addition to the base paint in order to obtain the most homogeneous distribution possible.
  - It is best to use a mechanical agitator for mixing thoroughly with the appropriate packaged quantity of hardener. The mixture is ready for use after a delay of 15 minutes and further through agitation.
  - Air and substrate temperatures: ideally 15-25°C, not below 10°C
  - Relative humidity: max. 80 % relative humidity
  - The surface temperature of the components being coated must be at least 3°C higher than the atmospheric dew point during application (see basic anti-corrosion standard DIN EN ISO 12944-7).
  - For exacting corrosion tests, a final drying period of at least 4 weeks should be observed without fail.
Technical Datasheet

noverox® WS
2-component epoxy coating - water-dilutable

Specification according to 1004/42/EC ChemVOCFarbV "Decopaint Directive"

<table>
<thead>
<tr>
<th>Sub-category according to Appendix IIA</th>
<th>VOC threshold value Stage 1</th>
<th>VOC threshold value Stage 2</th>
<th>max. VOC content when ready for use (incl. the max. quantity of thinner stated in &quot;Processing methods&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J (two-component reaction coating) Type Wb</td>
<td>140 g/l</td>
<td>140 g/l</td>
<td>&lt; 140 g/l</td>
</tr>
</tbody>
</table>

noverox® WS 2-component epoxy coating standard pack:

<table>
<thead>
<tr>
<th>Art. No.</th>
<th>Container</th>
<th>Size</th>
<th>Colour</th>
<th>Packaging unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-part bucket (6 kg / 4 kg)</td>
<td>10 kg</td>
<td>grey</td>
<td>1</td>
</tr>
</tbody>
</table>

Liability disclaimer

The above information is given without obligation. You are advised to conduct your own appropriate trials in every case. No warranty is given for this application. Liability on the basis of this information is precluded to the extent permitted by law. Responsibility for the application and compliance with the guidelines for use rests solely with the user. Modifications may be made to the product as a consequence of technical development. The latest edition of this information publication is valid.