

## General information

**DeraRED Ti** is a water-based epoxy hardener that forms an intumescent base coat when, prior application, is mixed with standard liquid epoxy resin (DGEBA-type, EEW=190, local supply) before use.



**DeraRED Ti** is a formulated B component for fire protection **base coat** for various industrial applications, **HybridRED** is required as a **topcoat**.

## Key properties

- ✓ ready formulated, water-based epoxy curing agent
- ✓ excellent intumescent activity
- ✓ high film build
- ✓ excellent adhesion to various materials

## Applications

- ✓ various composite parts for fire protection applications

## Usage

All surfaces must be dry and before application dust, oil or dirt is removed by appropriate means. **DeraRED Ti** basecoat has general a great adhesion to materials, but pre-treatment by sanding is recommend ensuring proper adhesion.

<i>substrate material</i>	<i>pre-treatment</i>	<i>primer</i>
<i>aluminium</i>	<i>shot blasting / sanding</i>	<i>Fresh SA-1 activation primer</i>
<i>steel</i>	<i>shot blasting / sanding</i>	<i>DeraFLOW 100 or equivalent</i>
<i>gel coated GRP</i>	<i>sanding with 120 grit</i>	<i>--</i>
<i>wood / MDF</i>	<i>sanding with 180 grit</i>	<i>DeraFLOW 100 or equivalent</i>

Please note: The **DeraRED Ti** reacts vigorously with isocyanates (used for polyurethane coatings), so it is essential to use a separate spray unit or to clean the unit thoroughly prior to applying the DeraRED system.

The working temperature should be 20 – 24°C. Stir the individual components well before combining and using them. Mix standard bis-A type liquid epoxy resin (DGEBA-type, EEW=190, local supply) with the **DeraRED Ti** supplied in the correct ratio as indicated on the label. Add water (10 – 20 %) to adjust viscosity. Working time is approximately 2 hours depending on ambient temperature and moisture.

After proper mixing, apply the product with conventional spray gun, pressure 2,5 – 3,0 bar, nozzle 1,8 – 2,0 mm several passes (wet-on-wet, wait a few minutes between passes) to reach a total wet film thickness of 600 - 1000 µm.

Let the base coat dry at room temperature overnight or alternatively force dry for 4 hours at 50°C. It is preferable for all coated layers to be slightly tacky rather than fully cured when coating additional layers on top. If coated surfaces must be left for more than 72 hours, then the surface will need a proper sanding before further coating application to ensure good adhesion.

## Storage & Handling

Keep tightly capped when not in use. Handle in a well-ventilated area. Store indoors at room temperature in the original containers kept tightly closed. Protect from direct sun light. Detailed safety information is contained in the material data safety sheet. Shelf life is 12 months.