

# Duasolid 50

## DESCRIPTION

A two-component, high-solids oxirane ester paint containing active anti-corrosive pigments.

## PRODUCT FEATURES AND RECOMMENDED USES

- An option when products containing iso-cyanate cannot be used. The paint offers quality similar to that achieved with polyurethanes
- Does not compromise protection or performance. Laboratory and field testing have proved the effectiveness of Duasolid systems in providing excellent corrosion protection, both for interior and exterior service environments
- A high solids content and can be applied in thick layers, thus enabling faster production. The product is an ideal option for OEM and other steel structures, equipment and machinery
- Used as a single coat or as a topcoat in oxirane-ester based systems on steel surfaces exposed to abrasion and chemicals in severe climatic conditions
- High film-building properties, up to 100 µm / one coat
- Resistance to continuous temperature up to +80°C dry heat and temporarily up to +120°C dry heat
- Suitable for earth moving machines, haulage and lifting equipment, forklifts, agricultural machinery, electric appliances, pumps and other steel structures, equipment and machinery

## TECHNICAL DATA

**Volume solids** approx. 65±2%.

**Weight solids** 77±2%

**Specific gravity** approx. 1.5 kg / l

**Mixing ratio**  
 Base 2 parts by volume Duasolid 50  
 Hardener 1 part by volume 008 7675, other hardeners: see page 2

**Pot life (+23°C)** 8 hours

## Recommended film thicknesses and theoretical coverage

| Recommended film thicknesses |       | Theoretical coverage   |
|------------------------------|-------|------------------------|
| wet                          | dry   |                        |
| 95µm                         | 60µm  | 10.8 m <sup>2</sup> /l |
| 160µm                        | 100µm | 6.5 m <sup>2</sup> /l  |

Practical coverage depends on the application method, painting conditions and the shape and roughness of the surface to be coated.

## Drying time

| DFT 80 µm  | + 23°C    |
|--|-----------|
| Dust dry, after  | 30–60 min |
| Touch dry, after   | 4–6 h     |
| Dry to handle, after                                     | 8–12 h    |
| Recoat with other Duasolid 50 paints, after              | a few min |
| Through dry at increased temperature after 45min / +80°C |           |

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation

## Gloss

Gloss. Varies depending on the used hardener. See page 2.



## Duasolid 50

### Color shades

RAL, NCS, SSG, BS, MONICOLOR NOVA and SYMPHONY colour cards. Temaspeed Premium tinting

# Duasolid 50

## APPLICATION INSTRUCTIONS

|                               |  |
|-------------------------------|--|
| <b>Surface preparation</b>    | <p>Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)</p> <p>Steel surfaces: Blast clean to grade Sa2½. (ISO 8501-1) If blast cleaning is not possible, phosphating is recommended for cold rolled steel to improve adhesion.</p> <p>Primed surfaces: Oil, grease, salt and dirt are removed from the surface by appropriate means. Repair any damage to the primer coat. Note the overcoating time of primer. (ISO 12944-4)</p>  |
| <b>Recommended primers</b>    | Duasolid Primer, Temanyl PVB, Duasolid 50.   |
| <b>Recommended topcoats</b>   | Duasolid 50.   |
| <b>Application conditions</b> | <p>All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and paint should not fall below +10°C during application and drying. Relative humidity of the air should not exceed 80% during application and drying. The surface temperature of steel should remain at least 3°C above the dew point. Good ventilation and sufficient air movement is required in confined areas during application and drying.</p>  |
| <b>Mixing components</b>      | <p>First stir base and hardener separately. The correct proportions of base and hardener must be mixed thoroughly before use. Use power mixer for mixing. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface and weaken the properties of the coating.</p>  |
| <b>Application</b>            | <p>For airless spraying, the product is thinned approximately 0–15% to the viscosity 30–60s (DIN4). Recommended nozzle tip is 0.011"–0.017", pressure ratio at least 30:1 and pressure 120–200 bar. Spray angle shall be chosen according to the shape of the object.</p> <p>For conventional spraying, the product is thinned approximately 10–15% to the viscosity 20–40s (DIN4). Recommended nozzle tip is 1,6–1,8 mm and pressure 2–4 bar.</p> <p>For electrostatic spraying, the product is thinned approximately 10–15% to the viscosity 20–40s (DIN4). Recommended nozzle tip is 0.011"–0.013" and pressure 120–140 bar. Spray angle shall be chosen according to the shape of the object.</p> <p>Properties and gloss of Duasolid 50 will vary according to the used hardener:</p> <p>Hardener 008 7675 gloss abt. &gt; 70 mixing ratio 2:1<br/>Hardener 008 7665 gloss abt. 60 mixing ratio 2:1<br/>Hardener 008 7667 gloss abt. 10 mixing ratio 2:1<br/>Hardener 008 7672 gloss abt. 40 mixing ratio 2:1</p> <p>Avoid hot spray!</p> |
| <b>Thinners</b>               | Thinner 1048, Thinner 1112   |
| <b>Cleaning of equipment</b>  | Thinner 1048 or Thinner 1112.  |
| <b>VOC</b>                    | <p>The Volatile Organic Compounds amount is 320 g/litre of paint mixture.</p> <p>VOC content of the paint mixture (thinned 15% by volume) is 399 g/l.</p>  |



## Duasolid 50

### HEALTH AND SAFETY

Containers are provided with safety labels, which should be observed. Further information about hazardous influences and protection are detailed in individual health and safety data sheets.

A health and safety data sheet is available on request from Tikkurila Oyj.

**For industrial and professional use only.**

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

The product is intended for professional use only and shall only be used by professionals who have sufficient knowledge and expertise on the proper use of the product. The information above is advisory only. To the extent permitted by applicable law, we shall not approve of any liability for the conditions under which the product is being used or for the use or application of the product.

In case you intend to use the product for any other purpose than that recommended in this document without first getting our written confirmation on the suitability for the intended use, such use takes place at your own risk.