

# Fontecoat EP 50

## DESCRIPTION

A two-component water-borne epoxy topcoat and a single-coat paint.

## PRODUCT FEATURES AND RECOMMENDED USES

- A semi-gloss epoxy paint to be used as a single-coat paint, primer, intermediate coat or topcoat in epoxy or polyurethane systems for steel surfaces. It dries rapidly and can be applied in thick layers
- An ideal option when a low VOC content is required. The paint has very good resistance against mechanical and chemical stress. The product provides protection comparable to that of solvent-borne epoxy paints
- Can be primed with the solvent-borne adhesion primer Temakeep. The system has extremely good adhesion and surface tolerance. At the same time, it is possible to achieve a very rapid production cycle
- Fast curing and environmentally friendly (low VOC)
- Resistant to diesel and biodiesel (RME) fuel
- The product has MED (Marine Equipment Directive) certificate no VTT-C-12360-15-18 and is thus accepted for painting surfaces inside the ships
- Recommended for framework, service platforms, conveyors and other steelwork, machinery and equipment

## TECHNICAL DATA

**Volume solids** 47±2% (mixture, ISO 3233)

**Weight solids** 62±2% (mixture)

**Specific gravity** 1.4 kg/l (mixture)

**Mixing ratio**  
 Base 1 part by volume Fontecoat EP 50  
 Hardener 1 part by volume 007 1019

**Pot life (+23°C)** 1½ h

## Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
130µm	60µm	7.7 m²/l
215µm	100µm	4.7 m²/l
225µm	120µm	3.9 m²/l

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

Note! The painting work should be performed and supervised according to 12944-7 if not otherwise stated in the respective technical data sheet. Excessive film thickness may result e.g. in cracking, sagging, prolonged drying time, soft film, less chemical resistance, gloss deviation, adhesion and intercoat functionality. In case the product is used otherwise than stated in the standard a written approval from Tikkurila is required.

## Drying time

DFT 100µm	+15°C	+23°C	+35°C
Dust dry, after	4h	2h	1h
Touch dry, after	8h	5h	2h
Recoat by itself, min. after	16h	6h	4h
Recoat without roughing, max. after	7d	5d	2d
Fully cured, after	14d	7d	3d



## Fontecoat EP 50

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

Water-borne paints and coatings are sensitive to moisture and cold before they are completely dry. Painted surfaces must be stored indoors at a temperature of min. +20°C for at least 40 hours before exposed to weather conditions. Forced drying may shorten the time before exposing the painted objects to outdoors. Please consult Tikkurila Technical Service for more information.

**Gloss**

Semi-gloss.

**Color shades**

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

# Fontecoat EP 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>	<p>Fontecryl 25, Fontecryl AP, Fontecryl PP, Fontezinc 85, Fontecoat EP 50 Beige, Fontecoat EP 50, Temazinc 99, Temacoat GPL-S Primer, Temakeep.</p> <p>(overcoating on touch dry surface)</p>
<b>Recommended topcoats</b>	<p>Fontecoat EP 50, Fontedur HB 80.</p>
<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 +15°C during application and drying. Relative humidity of the air should not exceed 70% 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. Tinting, mixing ratio, thinning, film thickness and drying conditions can effect the gloss.</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 0–10%. Recommended nozzle tip is 0.011"–0.023" and pressure 140–200 bar. Spray angle shall be chosen according to the shape of the object. DFT 160µm should not be exceeded.</p> <p>For conventional spraying, the product is thinned approximately 5–10%. Recommended nozzle tip is 1.8–2.0 mm and pressure 3–4 bar.</p> <p>For brush application the product should be thinned according to the circumstances.</p>
<b>Thinners</b>	<p>Water</p>
<b>Cleaning of equipment</b>	<p>Clean the spraying equipment immediately after use as follows:</p> <ol style="list-style-type: none"><li>1. Run the equipment with water to remove excess paint from the equipment.</li><li>2. Run the equipment with a mixture of approx 20% Thinner 1109 in clean water, at least two times.</li><li>3. Finally wash with undiluted Thinner 1109.</li></ol> <p>Wash the equipment with water before starting to paint again. Unwashed equipment can cause serious surface defects.</p> <p>Contact Tikkurila Technical Service for detailed instructions for cleaning 2-component application equipment.</p>
<b>VOC</b>	<p>The Volatile Organic Compounds amount is 60 g/litre of paint mixture. VOC content of paint mixture (thinned by 10% by volume) 55 g/l. VOC 2004/42/EC (cat A/j) 140 g/l (2010)</p>



## Fontecoat EP 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.