Temadur 20

DESCRIPTION

A two-component, semi-matt polyurethane paint containing anti-corrosive pigments, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES

- Due to its anti-corrosion pigmentation, Temadur 20 can be used as a single-coat paint for steel, zinc and aluminium surfaces. The paint is also used as a primer or as a semi-matt topcoat in epoxy-polyurethane systems.
- Resistance to weathering and abrasion makes Temadur 20 a good choice for transport and haulage equipment, storage tank exteriors, steel framework and other steel structures, machinery and equipment.
- The product has MED (Marine Equipment Directive) certificate no EUFI29-24002083-MED and is thus accepted for painting surfaces inside the ships.
- Environmental product declaration (EPD) in accordance with EN 15804+A2 & ISO 14025 / ISO 21930.
- Can also be applied on stainless steel.
- Recommended for transport and haulage equipment, storage tank exteriors, steel framework and other steel structures, machinery and equipment.

TECHNICAL DATA

Volume solids

57±2% (mixture, ISO 3233)

Weight solids

70±2% (mixture)

Specific gravity

1.3±0.1 kg/l (mixture)

Mixing ratio

Base	5 parts by volume	Temadur 20
Hardener	1 part by volume	008 7590

Pot life (+23°C)

4 hours

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
70µm	40µm	14.2 m²/l
175µm	100µm	5.7 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.

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Drying time

DFT 50 µm	+5ºC	+10ºC	+23ºC	+35ºC
Dust dry, after	45min	30min	15min	10min
Touch dry, after	8h	6h	4h	2h
Recoatable, after	No limitations.			

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

Gloss

Semi-matt.

Color shades

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

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APPLICATION INSTRUCTIONS

Surface preparation

Oil, grease, salts and dirt are removed by appropriate means. (ISO 12944-4)

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.

Zinc surfaces: Sweep blast clean with mineral abrasives, e.g. quartz sand, to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with Panssaripesu detergent. For hot dip galvanized surfaces see separate application instructions or contact Tikkurila Technical Service.

Aluminium surfaces: Sweep blast clean with none-metallic abrasives to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading or washed with Maalipesu detergent.

Stainless steel: Roughen the surface by grinding or sweep blasting using non-metallic abrasives.

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)

Recommended primers

Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temacoat RM 40, Temacoat SPA Primer, Temacoat SPA 50, Temabond ST 200, Temabond ST 300, Fontecoat EP 50.

Recommended topcoats

Temathane 90, Temadur 20, Temadur 50, Temadur 90, Temadur Clear, Temathane 50, Temathane PC 50, Temathane PC 80.

Application conditions

All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and paint should not fall below +5ºC 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.

Mixing components

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.

Application

For airless spraying, the product is thinned depending on the temperature of the components (base, hardener, thinner) and the required viscosity the paint approximately 0–20%. Recommended nozzle tip is 0.011"–0.015" and pressure 120–160 bar. Spray angle shall be chosen according to the shape of the object.

For conventional spraying, the product is thinned depending on the temperature of the components (base, hardener, thinner) and the required viscosity the paint approximately 0–20%. Recommended nozzle tip is 1.6–1.8 mm and pressure 3–4 bar.

For brush application product should be thinned according to the circumstances.

Thinners

Thinner 1048, Thinner 1067, Thinner 1061

Thinner 1061 (fast) is also suitable for conventional spraying.

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Cleaning of equipment	Thinner 1048, Thinner 1067, Thinner 1061
VOC	The Volatile Organic Compounds amount (ISO 11890) is 400 g/litre of paint mixture. VOC content ofthe paint mixture (thinned 20% by volume) is 485 g/l. VOC 2004/42/EC (cat A/j) 500 g/l (2010)
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.