

Temadur SC-F 50

DESCRIPTION

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

PRODUCT FEATURES AND RECOMMENDED USES

- Especially developed for single-coat painting agricultural and earth-moving machinery. Active anti-corrosive pigments ensure corrosion resistance even in severe climatic conditions.
- Can help speeding up the painting process and decrease the overall costs of the painting system.
- Has a good gloss and color retention, due to polyurethane chemistry. It forms durable, easy-to-clean, non-chalking finish.
- Excellent weathering and abrasion resistance.
- The product provides long-term, durable protection against atmospheric corrosion up to corrosivity class C3-H.
- Environmental product declaration (EPD) in accordance with EN 15804+A2 & ISO 14025 / ISO 21930.
- Recommended especially to be used as a single coat finish for agricultural and earth moving machinery and other machinery and equipment.
- Suitable to be used as a topcoat in epoxy/polyurethane systems exposed to weathering and chemical stress, e.g. storage tank exteriors, steel framework and other steel structures as well.



TECHNICAL DATA

Volume solids	65±2% (mixture, ISO 3233)		
Weight solids	77±2% (mixture)		
Specific gravity	1.4±0.1 kg / l (mixture)		
Mixing ratio	Base	4 parts by volume	Temadur SC-F 50
	Hardener	1 part by volume	008 7640
	Base	4 parts by volume	Temadur SC-F 50
	Hardener	1 part by volume	008 7645 (fast)
Pot life (+23°C)	app. 1 hour with Hardener 008 7640		
	app. 45 min with Hardener 008 7645		

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Recommended film thicknesses and theoretical coverage

Recommended film thicknesses/one coat application		Theoretical coverage
wet	dry	
120 µm	80 µm	8.1 m²/l
180 µm	120 µm	5.4 m²/l
Recommended film thicknesses/as a topcoat		Theoretical coverage
wet	dry	
60 µm	40 µm	16.3 m²/l
90 µm	60 µm	10.8 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 120µm		+5°C	+10°C	+23°C	+35°C
Dust dry, after	with Hardener 008 7640	1½h	1h	½h	20min
	with Hardener 008 7645	1½h	1h	½h	20min
Touch dry, after	with Hardener 008 7640	6h	3½h	1½h	50min
	with Hardener 008 7645	5h	3½h	1½h	40min
Recoatable, after	with Hardener 008 7640	No limitations.			
	with Hardener 008 7645				

Drying and recoating times are related to the film thickness, temperature, the relative humidity of the air and ventilation. When forced drying in temperatures +50–+100°C, use flash-off time between 5–30 minutes, depending on the wet film thickness and the actual temperature.

Gloss

Semi-gloss.

Color shades

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



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APPLICATION INSTRUCTIONS

Surface preparation	<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>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.</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>
Recommended primers	Temadur 10, Temadur 20, Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temacoat HS-F Primer, Temabond ST 200, Temabond ST 300, Temacoat Primer, Temanyl PVB, Temazinc 77.
Recommended topcoats	Temadur 50, Temadur 90, Temadur Clear, Temadur HB 50, Temadur HB 80, Temadur HS 90, Temadur SC-F 20, Temadur SC-F 50, Temadur SC-F 80, Temathane 50, Temathane 90, 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 +5°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.
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	<p>For airless spraying, the product is thinned depending on the temperature of the components and shape of the object approximately 0–15%. Recommended nozzle tip is 0.011"–0.015" and pressure 160–200 bar. Spray angle shall be chosen according to the shape of the object. In order to reach thicker coats (over 100 µm) use always "wet-in-wet" technique.</p> <p>For conventional spraying, the product is thinned approximately 10–15% to the viscosity 20–25s (DIN4). Recommended nozzle tip is 1.6–1.8 mm and pressure 3–4 bar.</p>
Thinners	Thinner 1048, Thinner 1067
Cleaning of equipment	Thinner 1048, Thinner 1067
VOC	The Volatile Organic Compounds amount (ISO 11890) is 320 g/litre of paint mixture. VOC content of the paint mixture (thinned 15% by volume) is 410 g/l. VOC 2004/42/EC (cat A/j) 500 g/l (2010)



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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.