Temadur HS Clear

DESCRIPTION

A two-component, glossy polyurethane varnish, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES

- Excellent weathering and abrasion resistance.
- Used as a topcoat on polyurethane paint systems.
- A durable, non-chalking topcoat with good gloss retention and easy to clean surface.

TECHNICAL DATA

Volume solids

55±2% (mixture, ISO 3233)

Weight solids

60±2% (mixture)

Specific gravity

1.0 kg / l (mixture)

Mixing ratio

Base	2 parts by volume	Temadur HS Clear
Hardener	1 part by volume	Temadur SC Hardener

Base	2.5 parts by volume	Temadur HS Clear
Hardener	1 part by volume	008 7640

Pot life

1 hour (+23ºC)

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
dry	wet	
40µm	75µm	13.8 m²/l
60µm	110µm	9.2 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 40µm	**+5ºC**	**+10ºC**	**+23ºC**	**+35ºC**
Dust dry, after	1h	50min	40min	20min
Touch dry, after	13h	10h	5h	2.5h
Recoatable without roughening, after	4 h–10 d	2 h–6 d	½ h–72 h	15 min–36 h

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

Gloss

Full gloss.

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Color shades	Clear.

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APPLICATION INSTRUCTIONS

Surface preparation	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	Temadur 10, Temadur 20, Temadur 50, Temadur 90, Temathane 50, Temathane PC 80, Temadur SC-F 20, Temadur SC-F 50, Temadur SC-F 80.
Recommended topcoats	Temadur HS Clear.
Application conditions	All surfaces must be clean, dry and free from contamination. The temperature of the ambient air, surface and lacquer 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	In order to obtain an even, non-porous finish, use a “wet-on-wet” technique: first a misty coat, then let the solvents evaporate for 2–15 minutes and then apply the full coat. Mixing of the components and adjustment of the viscosity should be done right before use in order to reach an optimal result. When coating surfaces painted with Temadur the best result is obtained when the varnish is applied on a tacky, 10–30 minutes dried, surface. For airless spraying, the product is thinned depending on the temperature of the components (base, hardener, thinner) approximately 10–15% to the viscosity 15–17s (DIN4). Recommended nozzle tip is 0.009"–0.011" and pressure 120–160 bar. Spray angle shall be chosen according to the shape of the object. Note! With Hardener 008 7640 it is recommended to thin the product 15–20%. For air-assisted airless spraying, the product is thinned approximately 10–15% to the viscosity 15–17s (DIN4). Recommended nozzle tip is 0.009"–0.011" and pressure 120–140 bar. Atomising air pressure should be about 2–3 bar. Spray angle shall be chosen according to the shape of the object. Note! With Hardener 008 7640 it is recommended to thin the product 15–20%. For conventional spraying, the product is thinned approximately 10–15% to the viscosity 15–17s (DIN4). Recommended nozzle tip 1.4–1.6 mm and pressure 3–4 bar. Note! With Hardener 008 7640 it is recommended to thin the product 15–20%.
Thinners	Thinner 1048, Thinner 1067, Thinner 1061 At conventional spray also Thinner 1061.
Cleaning of equipment	Thinner 1048, Thinner 1067, Thinner 1061

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VOC

The Volatile Organic Compounds amount (ISO 11890) is 400 g/litre of paint mixture.
VOC content in paint mixture (thinned 15% by volume) is 490 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.