Temadur HS 90

DESCRIPTION

A two-component, high-solids glossy polyurethane paint, hardener aliphatic isocyanate.

PRODUCT FEATURES AND RECOMMENDED USES

- Appearance of the painted surface close to car finishes. Forms a smooth and silky surface with outstanding gloss. The paint retains its gloss far more longer than conventional polyurethane paints.
- Can be applied without the “wet-on-wet” technique, even by airless spray. This enables faster throughput time and, therefore, more efficient production.
- A durable, easy-to-clean and non-chalking with good gloss and color retention.
- Recommended to be used as a glossy topcoat for epoxy systems exposed to weathering and/or chemical stress.
- Lower VOC content compared to conventional polyurethane finishes.
- The product has been tested for non-contamination of grain cargo at the Newcastle Occupational Health & Hygiene, Great Britain.
- Recommended for painting of transport and haulage equipment, storage tank exteriors, steel framework and other steel structures, machinery and equipment.

TECHNICAL DATA

Volume solids

64±2% (ISO 3233)

Weight solids

75±2%

Specific gravity

1.3±0.1 kg / l (mixed)

Mixing ratio

Base	4 parts by volume	Temadur HS 90
Hardener	1 part by volume	008 7640

Pot life (+23°C)

1½ hours

Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
70µm	40µm	16.0 m²/l
100µm	60µm	10.7 m²/l

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

Drying time

DFT 40µm	+5°C	+10°C	+23°C	+35°C
Dust dry, after	4h	2h	1h 20min	30min
Touch dry, after	20h	10h	2h 30min	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

High gloss.

Color shades

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

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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	Temacoat GF Primer, Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temacoat RM 40, Temacoat Primer, Temadur 20.
Recommended topcoats	Temadur HS 90, Temadur Clear.
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	In order to obtain an even, non-porous finish, spray a misty coat: first a thin layer, then let the solvents evaporate for 5–10 minutes and then apply the full coat. For airless spraying, the product is thinned depending on the temperature of the components (base, hardener, thinner) approximately 15–20% to the viscosity 23–28s (DIN4). Recommended nozzle tip is 0.009"–0.011" and pressure 140–180 bar. Spray angle shall be chosen according to the shape of the object. For conventional spraying, the product is thinned approximately 15–20% to the viscosity 23–28s (DIN4). Recommended nozzle tip is 1.4–1.8 mm and pressure 3–4 bar. For brush application product should be thinned according to the circumstances.
Thinners	Thinner 1048
Cleaning of equipment	Thinner 1048
VOC	The Volatile Organic Compounds amount (ISO 11890) is 320 g/litre of paint mixture. VOC content of the paint mixture (thinned 20% by volume) is 430 g/l.
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.**