



# 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 m <sup>2</sup> /l
100µm	60µm	10.7 m <sup>2</sup> /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
Recoatible, 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.



# Temadur HS 90

## APPLICATION INSTRUCTIONS

<b>Surface preparation</b>	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)
<b>Recommended primers</b>	Temacoat GF Primer, Temacoat GPL-S Primer, Temacoat GPL-S MIO, Temacoat RM 40, Temacoat Primer, Temadur 20.
<b>Recommended topcoats</b>	Temadur HS 90, Temadur Clear.
<b>Application conditions</b>	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.
<b>Mixing components</b>	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.
<b>Application</b>	<p>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.</p> <p>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.</p> <p>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.</p> <p>For brush application product should be thinned according to the circumstances.</p>
<b>Thinners</b>	Thinner 1048
<b>Cleaning of equipment</b>	Thinner 1048
<b>VOC</b>	<p>The Volatile Organic Compounds amount (ISO 11890) is 320 g/litre of paint mixture.</p> <p>VOC content of the paint mixture (thinned 20% by volume) is 430 g/l.</p>
<b>HEALTH AND SAFETY</b>	<p>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.</p> <p>A health and safety data sheet is available on request from Tikkurila Oyj.</p>

### 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.