



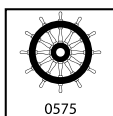
# Temadur Clear

## DESCRIPTION

A two-component, full gloss polyurethane varnish, hardener aliphatic isocyanate.

## PRODUCT FEATURES AND RECOMMENDED USES

- Provides extra protection and color and gloss improvement. The lacquer is used for topcoating polyurethane paint systems making the paint film durable, non-chalking and easy to clean.
- The product has MED (Marine Equipment Directive) certificate no EUFI29-24001980-MED and is thus accepted for painting surfaces inside the ships.
- Suitable for various surfaces. Temadur Clear also adheres well to aluminium and zinc surfaces.
- Excellent weathering and abrasion resistance.
- For industrial use only according to Directive 1999/13/EC.
- Recommended for transport and haulage equipment, storage tank exteriors, steel framework and other steel structures, machinery and equipment.



## TECHNICAL DATA

**Volume solids** 46±2% (mixture, ISO 3233)

**Weight solids** 52±2% (mixture)

**Specific gravity** 1.0 kg/l (mixture)

**Mixing ratio** Base 3 parts by volume Temadur Clear  
Hardener 1 part by volume 008 7590

**Pot life (+23°C)** 2 hours viscosity of 20s DIN 4  
4 hours viscosity of 16s DIN 4

## Recommended film thicknesses and theoretical coverage

Recommended film thicknesses		Theoretical coverage
wet	dry	
95µm	40µm	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.

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.



## Temadur Clear

### Drying time

DFT 40µm	+5°C	+10°C	+23°C	+35°C
Dust dry, after	40min	30min	20min	10min
Touch dry, after	12h	8h	4h	2h
Recoatable without abrading, after	4h–10d	2h–6d	½h–72h	15min–36h

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

### Gloss

Full gloss.

### Color shades

Clear.



# Temadur Clear

## 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)

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 non-metallic abrasives to an even roughness. (SaS, SFS 5873) If sweep blasting is not possible, the surface should be roughened by hand abrading.

### Recommended primers

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

### Recommended topcoats

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 +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

In order to obtain an even, non-porous finish, use a "wet in wet" technique. Spray a misty coat: first a thin layer, then let the solvents evaporate for 2–15 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 15–30% to the viscosity 14–18s (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.

For conventional spraying, the product is thinned to the viscosity 14–18s (DIN4). Recommended nozzle tip is 1.2–1.8 mm and pressure 3–4 bar.

Mixing of the components and adjustment of the viscosity should be done right before use in order to reach an optimal result.

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

The best result is achieved by using conventional spraying.

When coating surfaces painted with Temadur the best result is obtained when the varnish is applied on a tacky, 10–30 minutes dried, surface.

When applied on zinc or aluminium surfaces, it is recommended to apply at least two coats.



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**Thinners**

Thinner 1048, Thinner 1067, Thinner 1061

At conventional spray also Thinner 1061.

**Cleaning of equipment**

Thinner 1048, Thinner 1067, Thinner 1061

**VOC**

The Volatile Organic Compounds amount (ISO 11890) is 475 g/litre of paint mixture.

VOC content of the paint mixture (thinned 30% by volume) is 575 g/l.

Directive 2004/42/EC is not applicable in the use of the product.

**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 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.