NORMADUR 90 HS

TECHNICAL DATA SHEET 4/21

PROPERTIES AND RECOMMENDED USAGE

Paint type
NORMADUR 90 HS is a two component, glossy and high solids acrylic polyurethane top or single coat with an aliphatic isocyanate curing agent. Cures also at low temperatures.

Typical and recommended uses
Can be used in environmental classes C1-C2 as a gloss retaining and weather resistant single coat on easily painted steel products such as doors, transport containers and agriculture machines. NORMADUR 90 HS is used also as a top coat on steel structures, containers and vehicles both in and out doors in epoxy and polyurethane paint systems. It has a good gloss and colour retention.

Chemical resistance
Used in recommended paint systems, and correctly applied withstands occasional splashes and spillage of water, oil and weak process chemicals.

Weather resistance
Withstands sunlight and UV radiation.

TECHNICAL DATA

Volume solids*	60 ± 2 %
Total mass of solids*	810 g/l
VOC value*	370 g/l

* Values are calculated

Mixing ratio

Resin	4 parts by volume
Cure	1 part by volume

Pot life (+23 °C)
approx. 1.5 h after mixing

Packaging

	Volume (l)	**Size of container (l)**
Comp A	8	10
Comp B	2	2.5

Drying time 50 µm

	+15 °C	**+23 °C**
Surface dry	2 h	1 h
To touch	5 h	2 h
To recoat	11.5 h	5 h

Drying times are typical on recommended film thicknesses at given temperatures.

Calculated theoretical coverage and recommended film thickness

Dry	**Wet**	**Coverage**
40 µm	65 µm	15.0 m²/l
50 µm	85 µm	12.0 m²/l
80 µm	135 µm	7.5 m²/l

Practical coverage
Depends on wind conditions, the structure to be painted, the roughness of the surface and the application method.

Colour
NCS-, RAL-, KY-, SSG-colours with limitations. The objects painted with the same shade, but using different paint types, might have differences in the appearance and shade due to the variation in the paint properties, gloss levels and application methods.

Thinner
OH 10, OH 66 (slow) (Usually needs no thinning. If needed 0-5 %.)

Cleaner
OH 17

Finish
Gloss

APPLICATION INSTRUCTIONS

Surface preparations
All solid impurities that could prevent adhesion should be removed from the surfaces to be painted. Remove salts and other water soluble impurities using fresh water with brush, high pressure-, steam- or alkali cleansing. Remove grease and oils by alkali-, emulsion- or solvent cleansing (SFS-EN ISO 8504-3, SFS-EN ISO 12944-4). The surfaces should be rinsed carefully with fresh water after clensing. Old, painted surfaces, in which maximum overcoating interval has expired, additional roughening with suitable method is recommended. The place and time for the surface preparation should be chosen correctly, to avoid contamination and moistening of the treated surface before the paint application.

Steel surfaces
Blast cleaning to a min. of Sa 2½ (SFS-ISO 8501-1, SFS-EN ISO 8504-2). Cold rolled plates must be roughened with abrasive paper.

Aluminium surfaces
Remove grease and other contaminants. Sand sweeping before painting improves adhesion. NORMADUR 90 HS does not adhere to marine aluminium without primer.

Galvanized surfaces
Remove grease, oil and dirt with alkali-, emulsion- or solvent cleaning (SFS-EN ISO 12944-4). Hot dip galvanized steel surfaces are to be thoroughly sweep blast cleaned with fine abrasive. Galvanized thin steel plates should be washed with a 5 % ammonia solution followed by fresh water hosing. All galvanized and hot dip galvanized steel surfaces should be roughened and primed with EPOCOAT 21 PRIMER.

Primer
EPOCOAT 21 HB, EPOCOAT 21 PRIMER, NORECOAT FD PRIMER, NORECOAT HS PRIMER, NORMASTIC 405, NORMAZINC SE, PENGUARD EXPRESS

Top coat
NORMADUR 90 HS

Environmental conditions during application
The surface should be dry and clean. During application and drying time the temperature of the paint, air, and surface should be above +5 °C and the relative humidity below 80 %. The surface tem-perature should be min 3 °C above the dew point of the air.

Method of application
Airless spray or brush. Stir the resin and cure separately and then mix both components thoroughly. The mixing ratio is 4:1 (resin:cure) by volume. If needed thin 0-5 % (OH 10 or OH 66). Use a high pressure airlesss spray with a nozzle tip of 0,013” - 0,017” orifice. The spray angle depends on the object to be paint-ed. In order to ensure the best possible performance of the product, it is recommended that the paint is at room temperature before the application.

Storage and shelf life
The product must be stored in original sealed containers at temperatures from 5 °C to 30 °C. The storage conditions are to keep the containers in a dry, well ventilated space away from source of heat and ignition. When stored as described above, the unopened component A will keep up to 3 years and unopened component B to 1,5 years from the date of manufacture. The manufacturing date found in the label is also the batch number of the paint.

Safety
Please follow the environmental and safety instructions displayed on the container and Safety Data Sheet. Use under well ventilated conditions. Do not breathe or inhale mist, use respirator mask. Avoid skin contact. Spillage on the skin should immediately removed with suitable cleanser, soap or water. In case of contact with eyes, rinse immediately with plenty of clean water and if necessary seek medical advice.

Disclaimer
The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, as the paint is often used under conditions beyond our control, we cannot guarantee anything but the quality of the paint itself. We reserve the right to change the given data without notice. Please contact our office for more specific information. The product is intended for professional use only. If there are deviations in the different language versions of the technical data sheets, the English version applies.