EPOCOAT 300 / NAVIGUARD NM

TECHNICAL DATA SHEET 1/19

PROPERTIES AND RECOMMENDED USAGE

Paint type
Two component, solvent free epoxy coating which has an excellent resistance to water.

Typical and recommended uses
Can be used on blast cleaned steel surfaces which are exposed to mechanical abrasion and continuous water immersion or spillage. The coating has been tested and found suitable for use in the food industry (1993-3453-52495, Lahti Research Laboratory). It can also be used in potable water tanks (2004-08843-01/03, Environmental Laboratory, Helsinki City.

Typical applications
Recommended for use on water and seawater storage tanks and inner surfaces of pipes in normal temperatures. Flour, sugar and other foodstuff silos, walls and machine foundations in process and pharmaceutical plants and the dairy industry. Ship's fresh water tanks.

Chemical resistance
Used in recommended paint systems and correctly applied EPOCOAT 300 / NAVIGUARD NM withstands immersion to and continuous splashes of water, petrol and a wide range of process chemicals. The more specific chemical resistance of the coating in a given case should be clarified through the technical sales service of Nor-Maali Oy.

Temperature resistance
Used in recommended paintsystems and correctly applied EPOCOAT 300 / NAVIGUARD NM withstands continuous immersion in water up to 40°C.

Colour
Grey, white

Colour retention
Colour may change under the influence of the sunlight (UV-radiation).

Finish
Glossy

TECHNICAL DATA

Volume solids*	100 %
Total mass of solids*	1230 g/l
VOC value*	4 g/l

* Values are calculated

Mixing ratio

Resin	3 parts by volume
Cure	1 part by volume

Pot life (+23 °C)
approx. 30 min after mixing (reduced at higher temperatures)

Packaging

	Volume (l)	**Size of container (l)**
Comp A	12	20
Comp B	4	4

Drying time 300 µm (DFT)

	+15 °C	**+23 °C**
To touch	16 h	10 h
To handle	30 h	16 h
To recoat without roughening (min)	16 h	10 h
To recoat without roughening (max)	2 d	2 d
Fully cured	10 d	7 d

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

Calculated theoretical coverage and recommended film thickness

Dry	**Wet**	**Coverage**
150 µm	150 µm	6.6 m²/l
250 µm	250 µm	4.0 m²/l
300 µm	300 µm	3.3 m²/l

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

Thinner
OH 17, OH 31 (slow), OH 13. Standard airless spray max. 5 %.
Note! Do not thin with OH 17 or OH 31, if used in potable water tanks.

Cleaner
OH 17

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.

Primer
EPOCOAT 300 / NAVIGUARD NM is to be applied either directly on blast cleaned steel or on EPOCOAT 300 / NAVIGUARD NM.

Top coat
EPOCOAT 300 / NAVIGUARD NM

Environmental conditions during application
The surface should be dry and clean. During application and drying time the temperature of the varnish should be 20-25°C, air and surface temperature should not be below +15°C and the relative humidity below 70 %. The surface temperature should be min 3°C above the dewpoint of the air.

Method of application
High pressure airless spray (pressure ratio 1:60). Stir resin and cure separately before mixing the components together. The mixing ratio is 3:1 (resin:cure) by volume. The thoroughly mixed paint should be poured into the spray container, where it should be mixed once more. When using standard airless spray the paint can be thinned max. 5 % (OH 17 or OH 13). When painting potable water containers, thinner no 17 (OH 17) is not al-lowed to use. When painting large areas or if the EPOCOAT 300 / NAVIGUARD NM will be in immersion service, it is recommended to use 2 component spraying equipment for the application. The paint should not be thinned. The optimum spraying temperature of the paint without thinning is 23-25°C. High pressure airless spray with a nozzle tip of 0,017" - 0,026" orifice. Spray angle depending on the object to be painted. Apply EPOCOAT 300 / NAVIGUARD NM by holding the spray-gun at right angles from the object and cross spray cor-ners, handwelds and other places difficult to cover properly by single strokes. Make even parallel passes with 50 % overlap. **Welding seams, edges, corners and bolts should be touched up by brush before spray application.** 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 3 years from the date of manufacture. The manufacturing date found in the label is also the batch number of the paint. **Maximum storage temperature is +30 °C.**

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.