

EPOCOAT 280 GF

TECHNICAL DATA SHEET 8/20

PROPERTIES AND RECOMMENDED USAGE

Paint type

EPOCOAT 280 GF is a high solids, chemical resistant two-component epoxy coating reinforced with glass flakes.

Typical and recommended uses


Steel- and concrete surfaces in aggressive atmospheric environments, in elevated temperatures as well as in chemical and mechanical exposure. Offers extremely good protection against corrosion and has outstanding abrasion resistance. Typical uses are protection of wood drying plants, pressure vessels, hot ends of paper machines, containers for selected chemical products, waste water containers, water containers such as pulp tanks. Can also be used as a floor coating on acid leakage areas, process rooms, washing rooms of vehicles. Can be also used as a coating of ship's grey water tanks and under water areas.

Chemical resistance

Used in recommended paint systems and correctly applied withstands immersion and continuous splashes of water, petrol and wide range of process chemicals. The more specific chemical resistance information of the coating is provided by the technical sales service of Nor-Maali Oy.

Weather resistance

Epoxy paints have a natural tendency to chalk and discolor on exterior exposure.

	
Nor-Maali Oy Vanhatie 20 15240 Lahti, Finland DoP Nr. NOR2-0420 0416-CPR-7826	
EN 1504-2:2004 Surface protection products - Coating Physical resistance (5.1) Chemical resistance (6.1)	
Abrasion resistance	Weight loss < 3000 mg
Capillary absorption and permeability to water	W ₃ (w < 0,1 kg/m ² ·h ^{0.5})
Impact resistance	Class II: ≥ 10 Nm
Adhesion strength by pull-off test	≥ 2.0 N/mm ²
Dangerous substances	See safety data sheet

TECHNICAL DATA

Volume solids*	80 ± 2 %
Total mass of solids*	1140 g/l
VOC-value*	180 g/l

* Values are calculated

Mixing ratio

Resin	2 parts by volume
Cure	1 part by volume

Pot life (+23 °C)

approx. 1 h after mixing

Packaging

	Volume (l)	Size of container (l)
Comp A	12	20
Comp B	6	10

Drying time 250 µm

	+10 °C	+23 °C	+40 °C
To touch	14 h	5.5 h	3 h
To handle	32 h	12 h	6 h
To recoat (min)	32 h	12 h	6 h
To recoat (max, atmospheric)	5 d	3 d	2 d
Fully cured	14 d	7 d	3 d

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

Calculated theoretical coverage and recommended film thickness

Dry	Wet	Coverage
200 µm	250 µm	4.0 m ² /l
250 µm	310 µm	3.2 m ² /l
400 µm	500 µm	2.0 m ² /l

Practical coverage

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

Colour

Grey, pink and industrial paint colours with limitations (due to filling pigments there might appear minor colour differences between manufacturing lots).

Thinner

OH 17, OH 31 (slow)

Cleaner

OH 17

Finish

Semi gloss (evenness of the surface varies depending on application method and film thickness).

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 cleansing. 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 min. Sa2½ (SFS-ISO 8501-1, SFS-EN ISO 8504-2).

New concrete surfaces

For new concrete surfaces, please follow the instructions on technical data sheet of NORMAFLOOR 105 GPR. The concrete must be dry and at least 4 weeks old, and humidity no more than 4 %. (The floor humidity can be tested, if a humidity gauge is not available, by using a rubber mat. The colour of the floor under the rubber mat must not be darker than the rest of the floor after a 24 hour test.) The surface that is to be coated must be hard and strong enough (the surface should have reached at least 80 % of its final strength) and additives such as melamine resins, plastic dispersions, waxes, silicones, or silicates that might decrease the adhesion or absorption of the primer, must not be used. Uneven surfaces should be smoothed down by grinding. Abrasive blasting is recommended to remove laitance and other contaminants. If required a 15-20 % hydrochloric acid solution could be used.

Old fastened epoxy coating

Grease and other dirt should be removed by emulsion washing. Old coating surface is roughened with floor grinding machine. Holes and cracks should be filled with epoxy filler.

Primer on steel surfaces

EPOCOAT 280 GF, EPOCOAT 21 PRIMER

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.

Primer on concrete surfaces

NORMAFLOOR 105 GPR, NORMAFLOOR 205, NORMAFLOOR 209

Top coat

EPOCOAT 280 GF

Environmental conditions during application

The surface to be coated must be dry. During application and drying time the temperature of the coating, air and surface should be above +10 °C (with WINTER GRADE surface should be above -5 °C), and the relative air humidity below 80 %. The temperature of the surface to be coated should be at least 3 °C above the dew point of the air.

Method of application

Use high pressure airless spray or brush. On concrete surfaces use rubber blade trowel, cogged trowel or roller (appearance of the coated surface depends on application method). Stir resin and cure separately and then mix both components thoroughly. The mixing ratio is 2:1 (resin:cure) by volume. Thin only when needed max. 10 % (thinner OH 17). High pressure airless spray with a nozzle tip of 0,025"-0,043" orifice. All filters should be removed before application. Spray angle depending on the object to be painted. 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.

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.