NORMACID GLU

TECHNICAL DATA SHEET 4/20

PROPERTIES AND RECOMMENDED USAGE

Paint type
NORMACID GLU is a screed based on liquid epoxy resin and aggregate filler. On hardening, it has excellent mechanical durability and resistance to chemicals. It can be used on horizontal and vertical concrete surfaces instead of tiles or a rubber coating.

Purpose
NORMACID GLU is a surface coating for protection against mechanical wear and chemical attac, intended for use on concrete floors and tanks primed with NORMAFLOOR 209 or *NORMAFLOOR 105 Primer. *The concrete surface can also be wet.

Typical and recommended uses
In processing plants of the chemical, foodstuff and chemical forest industries, for floors, secondary containment reservoirs and wastewater tanks, floor ducts, machine beds and driving ramps that are exposed to chemicals, as well as storage tanks and pulpers. In the textile and mining industries, for concrete and steel surfaces exposed to mechanical wear and splashing.

Chemical resistance
Resistant to continual splashing and immersion in acid and alkali solutions as well as in certain solvents. The highest permitted temperature for use in secondary containment reservoirs is +70 °C. There is temporary hot water resistance at 90 °C (> 6 mm layer). The more specific chemical resistance of a NormAcid GLU coating in a given case should be clarified through the technical sales service of Nor-Maali Oy.

TECHNICAL DATA

Volume solids*	100 %
Total mass of solids*	1260 g/l
VOC value*	0 g/l

* Values are calculated (without sand filling.)

Mixing ratio and package sizes

Liquid part	
Resin (l)	2 / 6
Cure (l)	1 / 3
Total (kg)	3.5 / 10.5
Ready-mixed screed	
Liquid part (kg)	3.5 / 10.5
Filler (kg)	23 / 69
Total (kg)	26.5 / 79.5

Pot life (+23 °C)
approx. 1 h after mixing

Drying time

	+10 °C	**+20 °C**
Dry enough to walk on	10 h	6 h
Dry enough for usage	7 d	3 d

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

Recommended film thickness / coverage

	Thickness	**Calculated coverage**
Moderate exposure	> 4 mm	8.4 kg/m²
Severe exposure	> 6 mm	12.6 kg/m²

Actual coverage
The actual coverage in influenced by any roughness and unevenness in the surface to be coated and by the actual thickness of the coating applied, as well as by any wastage of pot content. The actual coverage is often approx. 10 % greater than the calculated coverage.

Storage temperature
min. +15 °C

Colour
Grey. Special shades available subject to limitations.

Compressive strength (ASTM C 579) > 63 N/mm²
Tensile strength (ASTM C 307) > 20 N/mm²
Bond strength (BS 1881/207) concrete tensile strength
* Values without sand filling.

APPLICATION INSTRUCTIONS

Surface preparations

New concrete surfaces
The best surface for coating is a dry concrete surface that is over 4 weeks old, the concrete having a relative humidity of 97 % (4 % by weight) at most. Use of NORMAFLOOR 105 PRIMER allows the screed to be applied on a damper surface also. Additives such as melamine resins, silicones or silicates that might decrease the adhesion or absorption of the coating, must not be used. Loose concrete, laitance, residues of plastic dispersions and waxes should be removed from the concrete surface with abrasive blasting or grinding. If required, acid scouring with approximately 15-20 % hydrochloric acid solution can be utilized; after 20 minutes reaction time, the surface is rinsed with clean water.

Old concrete surfaces
The concrete surface must be in good condition and firm. Grease and other dirt is removed from uncoated surfaces by emulsion washing. Grease removal can be made more effective by flame cleaning. An old surface coating or water-cement paste is removed by sand blasting, milling or grinding.

Environmental conditions during application
During application the temperature of the screed should be at least +15 °C. The temperature of the aurface and the air should be at least +5 °C and the relative humidity of the air bleow 70 %. The surface temperature should be at least 3 °C above the dew point of the air. The best result and the easiest working conditions are obtained in the temperature range +20 °C to +25 °C. Heating must not be increased during the application and hardening of the screed, otherwise there could be a risk of air pockets forming in the film. In order to ensure the possible performance of the product, it is recommended that the paint is at room temperature before the application.

Mixing the components
The curing agent is added to the resin in the correct mixing ratio (2:1, resin:cure) a little before application is begun. The mixing is done thoroughly using a slow-rotating mechanical mixer. After this the filler part is added, mixing with a concrete mixer or in a mixing vessel with a slow-rotating mechanical mixer. Inadequate mixing adversely affects the curing, the final finish and the durability properties. The workability time of the ready-mixed screed can be prolonged by pouring it onto the surface to be coated immediately after mixing.

Priming
To increase adhesion and to avoid air bubbles which can occur due to porosity of the concrete surface, this is first primed with NORMAFLOOR 209 solvent-free epoxy primer, following the product instructions. Use NORMAFLOOR 105 PRIMER when the concrete surface is new or damp. In order to produce “claws” which facilitate adhesion of the final coat, 0,6-1,2 mm coarse quartz sand is sprinkled over the wet primer surface.

Top coating
The application of the screed is begun 6-24 hours after priming. The screed mixture is spread over the area to be coated, and evened out to the wanted thickness, e.g. with a trowel or a screed board. The spreaded screed should be then conditioned on the floor couple of the minutes before smoothening to avoid the air pockets. The surface is smoothed and compacted using a steel spreader. The compactness of the film can be increased by rolling the screed surface with a short-haired mohair roller moistened with thinner OH 17. A finished NormAcid GLU film must be without holes and at least 4-6 mm thick. If the coating will be exposed to concentrated acids or alkalis, it is recommended that the extra top coat with EPOCOAT 280 GF is applied.

Vertical areas
On vertical areas the spreading is made with 1-2 kg smaller amount of filler.

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 2 years and unopened component B to 2 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.

CE

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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

CE

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SR-B2, 0-RWA10-IR10
EN 13813:2002
Synthetic resin screed

Release of corrosive substances	SR
Capillary absorption and permeability to water	W_3 (w < 0,1 kg/m^2·h$^{0.5}$)
Abrasion resistance EN 13892-5	RWA 1
Adhesion strength by pull-off test	B2,0
Impact resistance	IR10
Resistance to severe chemical attack	See chemical resistance list
Dangerous substances	See safety data sheet