



TECHNICAL DATA SHEET

AMERIN® D-2/R RAPID PRIMER

1. Description:

Component A is a modified solvent-free epoxy resin

Component B is a modified polyamine

2. Characteristics:

- excellent, generally used rapid primer
- excellent mechanical resistance
- excellent resistance to water, salt, bases, oils, petrol
- very good general chemical resistance
- excellent filling with quartz sand
- wide range of application
- dry heat resistance for short term: - 30 C° to +105 C°, long term up to +70 C°
- wet heat resistance for short term: + 60 C°, long term +50 C°

3. Areas of use:

- as the primer of epoxy systems on concrete, cement estrich, when faster hardening is necessary or when works have to be made at lower temperature
- diluted with AMERIN H-1 thinner for impregnation of concrete
- filled with quartz sand for making levelling mortar and epoxy concrete of high strength and various composition
- in two layers thin coating on concrete
- as an adhesive for concrete to concrete, concrete to metal, for repairing voids in concrete, for crack repair
- it can be used as a primer for the polyurethane based products if scattered with quartz sand for the firm adhesion before the application of the polyurethane coating and the full curing time (min 12 hours at 20 °C)

4. Technical data:

Mixing ratio:

AMERIN D-2/R component A

2 parts by weight (kg)

AMERIN D-2/R component B

1 parts by weight (kg)

	component „A”	component „B”	Mixture
Appearance	slightly yellowish, clear, transparent liquid	colourless or slightly yellowish, clear, transparent liquid	
Density, at 20 C°, g/cm³	1,11-1,15	0,94-0,98	1,05-1,10
Viscosity at 25 C°, mPas	700-1200	200-400	



TECHNICAL DATA SHEET

	The mixture
Gel time, 100 g, at 25 C°, min	5-10
Pot life at 20 C°, min.	appr. 5
Minimum curing temperature as a primer, C°	+ 3
Minimum curing temperature as a coating °C	+ 8*
Suggested temperature of application, °C	+ 15 - + 20
Suggested relative humidity during application, %:	max. 85
Overcoating time at 20 C°, hours	appr. 3
Coating can be polished at 20°C, hours	appr. 4
Resistant to foot traffic at 20 C°, after... hours	appr. 6
Resistant to mechanical loading at 20 C°, after... days	2
Time of full hardening, resistant to water and chemicals, at 20°C, days	5
Volume shrinkage during curing, %:	max. 4
Linear shrinkage during curing, %:	max. 0,4

*Mind that curing time significantly extends below 10-12°C!

	The hardened material*
Compressive strength, N/mm ²	min. 75
Bending strength, N/mm ²	min. 65
Tensile strength, N/mm ²	min. 45
Shore D hardness	74-80
Tear-off strength, N/mm ²	concrete tears off
Water resistance	water-resistant
Chemical resistance	acc. to chemical-resistance chart
Combustibility	on non-combustible substrate hardly combustible
Flame spreading	on non-combustible substrate moderate flame spreading

*Determined after the 7-day full cure time

5. Requirements to the substrate:

See Application Instruction of Amerin Products

6. Surface preparation:

See Application Instruction of Amerin Products

7. Mixing of components:

See Application Instruction of Amerin Products

Caution! The reactivity of Amerin D-2/Rapid is higher than those of the most epoxy products. For this reason, in a larger quantity the mixture gels faster, its pot life considerably decreases. Therefore during application it is recommended to mix smaller quantities together. (e.g.: 2+1 or 3+1,5 kg) In case of additional quartz sand, the pot life slightly increases.



TECHNICAL DATA SHEET

The remaining, unused mixture is inclined to self-ignite even in an amount of 1 kg. In order to prevent this, a 5-10 times larger quantity of quartz sand should be added to the mixture, than the mixture itself before gelling.

8. Application:

Consumption data given below are valid only on smooth, even, non-cracked, voidless, type of at least C-16, dry (moisture content max 3,5%) concrete.

8.1. Priming

Consumption of AMERIN D-2/R: 0,3 kg/m²

Application: with Teddy-roller or rubber squeegee.

Ponding of the primer should be avoided!

In most cases sand should be scattered on the fresh coating (depending on the thickness and type of the following layer).

Repeating this priming process the following day (without the scattering of quartz sand), a pore closing, transparent, dust binding coating of concrete can be produced.

8.2. Equalization

If necessary the repair of the substrate can be done 4-6 hours after the priming according to the following:

8.2.1. Up to the 0,5-1,0 mm thickness

- 1,0 part by weight AMERIN D-2/R, consumption of resin approx. 0,6 kg/m²/mm
- 2-3 parts by weight quartz sand (Ø 0,1-0,5 mm)

8.2.2. Up to 5 mm thickness

- 1,0 part by weight AMERIN D-2/R, consumption of resin approx. 0,25 kg/m²/mm
- 2,0 parts by weight quartz sand (Ø 0,1-0,5 mm)
- 3,0 parts by weight quartz sand (Ø 0,6-1,2 mm)

8.2.3. Up to 5-20 mm thickness

- 1,0 part by weight AMERIN D-2/R, consumption of resin approx. 0,15-0,2 kg/m²/mm
- 2,8 parts by weight quartz sand (Ø 0,1-0,5 mm)
- 6,2 parts by weight quartz sand (Ø 1,0-2,0 mm)

8.2.4. Up to 20-50 mm thickness

- 1,0 part by weight AMERIN D-2/R, consumption of resin approx. 0,1-0,15 kg/m²/mm
- 2,5 parts by weight quartz sand (Ø 0,1-0,5 mm)
- 6,0 parts by weight quartz sand (Ø 1,0-2,0 mm)
- 5,5 parts by weight quartz sand (Ø 3,0-5,0 mm)

8.3 Overcoating

An AMERIN (e.g.: AMERIN DT-4, DT-V, etc.) topcoat can be applied 4-16 hours after application of priming no. 8.1 or if necessary after the equalization no. 8.2.

Caution! On an equalized surface it is necessary to do a preliminary closing of pores with thixotropic AMERIN D2/R if you want to produce a self-levelling layer afterwards. This is made by mixing AMERIN D2/R with 2-4 % thickening (thixotropic) agent.

9. Packaging:

In 15 kg units (Component A: 10 kg, Component B: 5 kg)

Material can be supplied in other packaging units on request.



TECHNICAL DATA SHEET

10. Storage life:

12 months with both Component A and B (For information on storage see *Application Instruction of Amerin Products*)

11. Work and Health Safety:

The cured material is physiologically harmless. Information on components can be found in *Material Safety Data Sheets*.

12. Fire protection classification:

Class III. (both components are inflammable)

13. Cleaning:

The components and the uncured mixture can be removed with AMERIN H-1 thinner. The cured material can be removed by mechanical means only.

14. Handling and disposal of waste:

The cured material can be disposed of with domestic waste.

Remnants in the can must be handled as dangerous material and as residue of lacquer.

15. Licences and certifications:

A-733/1994.

CE: 90-07-0201 TSUS

This technical data sheet has been composed to the best of our technical knowledge, experiences and experiments. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions.

Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.

For more information contact the manufacturer or his representative.

Aug, 2009.

Amerin D-2R ENG 2