

S&P Resin Epoxy 55



Epoxy Adhesive (Laminating resin)

Description



Solvent-free, transparent 2-component epoxy resin with a formulated amine hardener.

Application areas

S&P Resin Epoxy 55 is used as a laminating resin for the following S&P Sheet systems:

- S&P C-Sheet
- S&P G-Sheet
- S&P A-Sheet
- S&P slot-applied laminate

Sheets of up to 400 g/m² can be laminated directly on the bearing substrate. Sheets of 400 - 800 g/ m² are pre-impregnated and are applied wet.

Advantages

- good wettability
- high stability
- high adhesive pull strength on concrete and on steel
- resistant against bases, diluted acids, saline solutions, mineral oils and aliphatic hydrocarbons
- weather resistant
- almost non-yellowing

Product Data

Type

Appearance / Colour Component A Epoxy resin solution: liquid / light yellow
Component B Hardener for epoxy resin: viscous / light yellow

Delivery Units of: 6 kg
Container of: 1'000 l

Storage In original packing at + 5 °C to + 25 °C, at least 24 months

Technical Data

(The standard values below indicated are based on +20 °C and 50 % relative humidity of air)

| | |
|-----------------------------|-------------------------|
| Density | 1.11 kg/l |
| Mixing ratio by weight | 2:1 (resin to hardener) |
| Application temperature | + 8 °C bis + 35 °C |
| Application time at + 10 °C | 3 h |

| | | | |
|---|----------------|---------|---------------------------|
| | + 20 °C | | 45 min. |
| | + 30 °C | | 30 min. |
| Dust-dry after | | | 4 h |
| Hardening time | | | 7 days |
| Glass transition temperature (T _g) EMPA 461.427/2 | | | 44°C (EN 12614) |
| Tensile strength after ISO 527-2:1993(E) EMPA 461'427 | 14 days | | 35.8 N/mm ² |
| Elongation at break ISO 527-2:1993(E) EMPA 461'427 | 14 days | | 2.3 % |
| Modulus of elasticity static ISO 7500-1:2004-11 (EMPA 461'427) | 14 days | | 2'581.8 N/mm ² |
| Modulus of elasticity dynamic EMPA 461.427/2 | 14 days | + 20 °C | 2'515 N/mm ² |
| | 14 days | - 20 °C | 2'989 N/mm ² |
| Adhesive pull strength on concrete job-site tests | | | failure in concrete |
| Adhesive pull strength on steel In-house tests | | | > 15 N/mm ² |
| Toxicity class | Comp. A | | 9 |
| Toxicity class | Comp. B | | 8 |
| Transport class / UN-Nr. | Comp. A | | III / 3082 |
| | Comp. B | | III / 2735 |

Treatment:

The S&P Resin Epoxy 55 is delivered in the prescribed mixing ratios. The hardener (Comp. B) is poured into the resin (Comp. A). It is important that the hardener is used up completely. Mixing of both components is preferably done by means of a low speed drill equipped with a mixing paddle. Mix thoroughly and carefully scrape the sides and bottom of the container while mixing to ensure that the hardener is evenly distributed vertically as well. After blending, the mix must be homogeneous, i.e. without streaks. The temperature of both components at the moment of mixing should ideally be 15 °C – 20 °C. Higher temperatures reduce the application time considerably.

The S&P Resin Epoxy 55 must be protected from moisture for 6 –8 hours after the application. Should any contact with moisture occur during this period, the surface will turn white and tacky; the resin below, however, will still cure perfectly. In discoloured or tacky areas, the bond to any subsequent coating is either reduced or completely prevented.

Safety precautions:

When fully cured, the S&P Resin Epoxy 55 is physiologically harmless. However, the hardener (Comp. B) is caustic. Strict measures must be taken to ensure that there is no skin contact with the resin (Comp. A) or the hardener (Comp. B). It is recommended to wear rubber gloves during handling and application. Should skin contact occur, rinse with soap and plenty of water. Should eye contact occur, rinse at once with plenty of water and use an eye washing kit (available in pharmacies). Seek medical advice immediately.

Important Safety instructions

For detailed safety information, it is recommended that you seek advice in the current safety data sheet on www.sp-reinforcement.eu.

Country-specific data

The information in this product data sheet is valid for products delivered by S&P Clever Reinforcement Company AG, Switzerland. Please note that the information in other countries may differ, and use local product data sheet for each respective country.

Specific indication

The information and data in this technical data sheet are made to ensure the normal intended use and normal application suitability; the information and data is based on our knowledge and experience. This does not absolve the user from their own responsibility to check the suitability and application methods.

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