



TECHNICAL DATA SHEET No. 13

POLYESTER RESIN

Product intended for professional use.

PRODUCT RANGE:

43 310 Polyester Resin 1 kg

CHARACTERISTICS:

The product is designed for processing in manual or spray application technology. Used together with fibrous materials, it acts as a binder to enable the manufacture of laminated components. The resin can be applied onto glass or carbon fibres, also in the form of mats and fabrics, as required. A properly made and cured composite is characterized by high performance parameters and is resistant to weather conditions, high temperatures (up to 80°C), lubricants, oils, petrol, etc. Polyester Resin provides very good adhesion to various types of surfaces to offer a wide range of possible applications. Perfect for reconstruction and repair of small vessels, caravans, RV bodies, spoilers or as an alternative solution for the repair of corroded car body components. After sanding, any Polfill polyester putty can be used to smooth out the surface. It is processed with a liquid-form hardener.

PHYSICAL AND CHEMICAL PROPERTIES:

Resin – liquid of blue colour with a characteristic aromatic smell, containing styrene. Maximum volatile organic compounds content in ready-to-use product: 540 g/L.

APPLICATIONS

SUBSTRATE:

- steel,
- · galvanized steel,
- stainless steel,
- aluminium,
- polyester laminates,
- primer paints,
- cured varnish coatings,
- plastics,
- wood.

Do not apply directly onto reactive substrates or one-component acrylic and nitrocellulose products.





SUBSTRATE PREPARATION:

Steel, galvanized steel – Use Polfill Silicone Remover AUTOMOTIVE or PRO to remove dirt and impurities. Sand the surface manually or mechanically with P80-P180 abrasive paper. Dust off with compressed air and then degrease again.

Aluminium – Use Polfill Silicone Remover AUTOMOTIVE or PRO to remove dirt and impurities. Sand the surface manually or mechanically with P240-P400 abrasive paper. Dust off with compressed air and then degrease again.

Putties and laminates – Use Polfill Silicone Remover AUTOMOTIVE or PRO to remove dirt and impurities. Sand the surface manually or mechanically with P150-P320 abrasive paper. Dust off with compressed air and then degrease again.

Two-component acrylic and epoxy primers – Apply the resin to a properly dried and cured coating. Use Polfill Silicone Remover AUTOMOTIVE or PRO to remove dirt and impurities. Sand the surface manually or mechanically with P180-P320 abrasive paper. Dust off with compressed air and then degrease again.

Cured varnish coatings – Use Polfill Silicone Remover AUTOMOTIVE or PRO to remove dirt and impurities. Sand the surface manually or mechanically with P180-P320 abrasive paper. Dust off with compressed air and then degrease again.

Wood, furniture boards or the like – The surface must be free from all kinds of impurities. Sand manually or mechanically with P120-P240 abrasive paper. Dust off with compressed air.

PREPARATION OF REINFORCEMENT (sold separately):



Prepare a suitable piece of reinforcement (e.g. glass mat) so that its surface extends at least 2 cm beyond the damaged area

PREPARATION OF RESIN:



Mix thoroughly 100 parts by weight of polyester resin with 2-3 parts by weight of the hardener until a uniform colour.

Application time after mixing with the hardener is up to 10 minutes at 20°C. The use of an incorrect amount of the hardener will affect the drying process and may cause coating defects and affect the performance and strength properties of the laminate.

HARDENER USED:

2-Butanol peroxide – supplied with the resin.





APPLICATION:



Apply the resin mixed with the hardener with a brush to the cleaned repair area.



Apply the mat or fabric, press it down and saturate it with resin using a brush or a roller. Depending on the scale of damage, several reinforcement layers can be applied.



Spray application should follow the lamination process for the resin application equipment.

Minimum working temperature 10°C. Do not pour unused resin mixed with the hardener into the can.

DRYING TIME:



45 minutes/20°C.

After curing, the laminate surface can be machined or smoothed out with a polyester putty

Temperatures below 20°C extend the drying time.

SANDING:





Dry sanding, manually or mechanically.

Preliminary sanding with P80 - P150 abrasive paper.

CLEANING THE EQUIPMENT:

POLFILL NITRO Thinner.

STORAGE:

Store in original, tightly closed containers, in a dry, cool place, away from sources of heat and ignition, at a temperature from 5 to 20°C. Do not expose to direct sunlight.

WARRANTY PERIOD:

The warranty period is given on the product label.

Date: 27/02/2023 Rev. 3





HEALTH & SAFETY RECOMMENDATIONS:

Product safety data sheet and applicable health and safety regulations for working with chemical agents.

The information contained in this sheet has been developed based on our knowledge and practice. However, no individual product properties can be guaranteed under different conditions of use beyond our control. Therefore, we cannot accept full responsibility for the results obtained in specific conditions of use. It is necessary to test the application of the product on a small area, due to the potential differences in the product performance depending on the substrate on which it is applied. We guarantee proper quality when used in accordance with the instructions contained in this Technical Data Sheet.