Technical Information

Terostat-MS 930

One-component Sealant, Soft Elastic

Basis: MS®-Polymer Issue: 29.08.2002

Product Description

Terostat-MS 930 is a gun-grade, one component sealant based on silane modified polymer, which cures by reaction with moisture to a soft elastic product. The skin formation and curing times are dependent on humidity and temperature, and the curing time also depends on joint depth. By increasing the temperature and moisture these times can be reduced: low temperature as well as low moisture retard the process.

Terostat-MS 930 is free of solvents, isocyanates, silicones and PVC, and is odourless. It demonstrates good adhesion to many substrates and is compatible with suitable paint systems. The sealant also demonstrates good UV resistance and can therefore be used for interior and exterior applications.

Terostat-MS 930 allows accelerated curing as 2-component material. See seperate data sheets Terostat-MS Power & Speed Technologie or Terostat-MS 2K-Technologie.

Application Areas

Terostat-MS 930 is used for the following applications:

seam and joint sealing in vehicle body, railway carriage and container manufacture; ship and boat building; metal constructions; the equipment, electrical, plastics, air-conditioning and ventilation industries; for conventional vehicle window glazing between rubber profile and glass (good adhesion to most rubber qualities, even on EPDM-basis), for bonding of floor coverings in bus manufacturing (if required, we will provide you with the necessary information on suitable application equipment).

Technical Data

Colours: white, grey, black Odour: odourless Consistency: pasty, thixotropic

Density: approx. 1.5 g/cm3 Solids: 100 %

Curing mechanism: humidity curing

Sag resistance: no sagging (DIN-profile 15 mm)

Skin formation time *: approx. 20 mins approx. 4 mm/24 h Cure rate *:

Shore-A-hardness(DIN 53505) *: approx. 27 Tensile strength *: approx. 0.9 MPa (according to DIN 53504)

Elongation to break *: approx. 300 % (according to DIN 53504)

Stress at 100 % elongation *: approx. 0.5 MPa (according to DIN 53504)

<2 % Permitted permanent movement 25 %

Paint compatibility: in principle compatible a retardation of drying may be observed with alkyd resin systems.

(Trials are recommended) UV resistance: no significant changes of the surface

Test method: drv UV

UV source: Osram Vitalux 300 W

25 cm Distance to the specimen: test period: 6 weeks



Volume change (DIN 52451):

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Application temperature: 5°C to 40°C
In service temperature range: -50°C to 100°C
Short exposure (up to 1 h): 120°C

* DIN 50014 standard climate: 23°C, 50 % relative air humidity

Application

Preliminary statement

Prior to application it is necessary to read the **Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed.

Pretreatment

The substrates must be clean, dry, oil and grease free. Depending on the surface it can be necessary to roughen the surface or to use a primer/adhesion promoter to provide optimum adhesion.

When manufacturing of plastics, external release agents are often used; these agents must be absolutely removed prior to starting bonding or sealing. Due to the different compositions of paints, especially powder paints, and the large number of different substrates, application trials before use are necessary. For cleaning, Cleaner+Diluent A, D and FL from the Teroson programme are suitable.

When bonding and sealing PMMA, e.g. Plexiglass[®], and polycarbonate, e.g. Makrolon[®] or Lexan[®], under tension, stress corrosion cracking may occur. Application trials before use are necessary.

There is no adhesion to polyethylene, polypropylene and PTFE (e.g. Teflon®). Substrates not mentioned above should be subject to trials.

Application

Application from 310 ml cartridges is made with the Teroson Hand or Air Pressure Pistols, and from plastic wallets (310 and 570 ml) with the corresponding FK-Hand or FK-Air Pressure Pistols. In the case of compressed air application a pressure of 2–5 bar is required.

Low material temperatures of the sealant will lead to an increase of viscosity, resulting in a lower extrusion rate. This can be avoided by bringing the sealant up to room temperature prior to application. If substrates are too cold temperature may fall below dew point causing condensation. This can be avoided by bringing the substrates up to room temperature in time.

Terostat-MS 930 can also be applied from hobbocks or drums with high pressure pumps with follower plates. See seperate applications directions of Terostat-MS products in hobbocks and drums.

After gunning Terostat-MS 930 can be smoothed with Terostat-Smoothing Agent. Where joint edges have been masked the surface can be smoothed by using a spatula.

Cleaning

For cleaning application equipment contaminated with uncured Terostat-MS 930 we recommend the use of Cleaner+Diluent A, D or FL.

Test Certificates

- sensoric testing in accordance with DIN 10955 (Test certificate of SKZ-Würzburg, dated (17.04.1989)
- certificate regarding neutral odour in accordance with the Butter Test BS-3755/1964 (Test certificate No. 57412 HA from Germanischer Lloyd, dated 03.11.1989)
- FDA status (letter of approval for use in reefer containers by K + H, Washington, dated 07.11.97)
- certificate on electrical characteristics in accordance with DIN 53482 and water vapour permeability in accordance with DIN 53122 (Test certificate No. K 91007 of Materialprüfungsanstalt, Darmstadt, dated 12.07.90)
- impact testing (Test certificate No. 045/92 of AEG-Schienenfahrzeuge GmbH, Henningsdorf, dated 18.09.92)



Storage

Frost-sensitive no

Recommended storage temp. 10°C to 25°C

Shelf-life 12 months in unopened original packaging

Packaging

Cartridge 310 ml (white, grey, black)
Plastic wallet 310 ml (white, grey, black)
Plastic wallet 570 ml (white, grey)

Packaging in hobbocks or drums on request

Hazard Indications/ Safety Recommendations/ Transport Regulations

see Safety Data Sheet

Important

The above data, particularly the recommendations for application and use of our products are based on our knowledge and experience. Due to different materials and conditions of application which are beyond our knowledge and control we recommend strongly to carry out sufficient tests in order to ensure that our products are suitable for the intended processes and applications. Except for wilful acts any liability based on such recommendations or any oral advice is hereby expressly excluded.

This Technical Data Sheet supersedes all previous editions.

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