



Technical Data Sheet

Sealium®

One-component-material for sealing
metals, alloys and casting materials



MultiMetall
the MetalExistenceCompany®

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MultiMetall • P.O. Box 12 02 64 • 41720 Viersen • Germany
Tel: +49 (0) 21 62-97 00 9-0 • Fax: +49 (0) 21 62-97 00 9-11
Email: info@polymermetal.com • Web: www.polymermetal.com

Technical Data Sheet

Sealium®

Product description



Mostly Sealium is used as sealant and sealing of metallic casting materials. Furthermore alloys and thermal coated components can be treated with Sealium. As a one-component material with extremely high capillary activity, Sealium penetrates micro-porosities or hair-line cracks and reacts in the structure of the metallic material. Thereby leaks of a width up to max. 0,2 mm are repaired. Bigger wall thicknesses of the treated work pieces improve the effectiveness of Sealium. Treated components are pressure sealed even under alternating temperature loading. Sealium is an excellent invisible corrosion-protection material.

Technical data

Application consistency:	liquid
Colour after curing:	colourless
Viscosity at 20 °C:	6 mPas
Pressure tight up to:	200 bar
Temperature resistance:	-40 °C to +350 °C
Density:	0,92 g/cm ³
Cured at 20 °C:	24-72 h

Data for pressure, heat resistance and curing are maximum values. Pore size and wall thickness of the materials to be sealed influence the technical data and the curing time. After curing, Sealium is physiologically generally recognised as safe.

Chemical resistance

Sealium has a very good resistance against oil and grease, diluted acids, alkalis and salt solvents. Against aliphatics (i.e. fuel) and alcohol it is resistant. It is not resistant to esters (i.e. ethyl acetate) and ketones (i.e. acetone). Aromatic hydrocarbons do act swelling on Sealium, therefore Sealium is only conditionally resistant to these chemicals.

Surface preparation

- Make the surface free of dirt and dust to enable the penetration of Sealium into the work piece
- Foreign substances like leak test fluids must be removed completely
- Thoroughly degrease with MM-Degreaser Z or at least with a good grease dissolver (ethyl acetate, acetone,...); don't use alcohol, benzine or paint thinner

Application instruction

Sealium can either be applied with a brush, by injection or by immersion method.

After stroking Sealium onto the surface by using a brush wait appr. 2 minutes till it soaks into the material. Then repeat this operation several times till a saturation of the pores in the metal work piece sets in and no more Sealium is taken in the device.

When using an immersion bad all containers made of solvent-resistant plastic or coated with enamel are suitable. Some plastic materials are not resistant to Sealium; therefore their resistance should be checked before application. Containers made of metal are not suitable because the metal-active reaction causes thickening or gelling of Sealium. The work piece to be coated should be immersed for appr. 5 - 30 min depending on the wall thickness. The immersion bath should be well covered in order to avoid a change of the viscosity of Sealium.

All used tools should be cleaned straight after use.

Working security

Make sure the room is well ventilated. Do not leave containers uncovered, keep away from flash sources. Take measures against electric charging. Avoid eye and skin contact. In case of skin contact, wash thoroughly with soap and water. In case of eye contact, rinse thoroughly with water.

Storage

Product	Temperature commendation	Shelf life
Sealium	~ 22 °C	min. 1 year

If the container is tightly closed again immediately after usage, the material does not lose its high quality performance after repeated openings of the container.

Order information

No.	Product	Unit
551	Sealium, liquid	2000 ml

No.	Accessories	Unit
10	MM-Degreaser Z, liquid	1000 ml
11	MM-Degreaser Z, liquid	250 ml

Availability

Technical data sheets are generally available in German or English language. Sealium is only produced in Germany and delivered worldwide within short time by MultiMetal. In addition to that our MM-products are internationally available from many MultiMetal-partners. Ask for further products from MultiMetal.

Note

The product information and instructions provided in this leaflet were prepared to the best of our knowledge and serve information purposes only. We recommend that appropriate tests are carried out prior to application in order to ensure that the products and methods fulfil the purpose desired by the user. In this procedure, the given data may serve as a basis. Application and processing of the products lie outside our possible control and are therefore the sole responsibility of the user.

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Data Sheet Version 12.0 dd. 17.07.2013
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