TECHNICAL DATASHEET

SEALER

dichtol HTR HS #2530

Productdescription

DIAMANT dichtol HTR HS (High Temperature Resistant High Solid) is a highly capillary-active polymer mixture based on silicone resin. The low viscous system was developed to penetrate very deep into porous structures by capillary force and to shoot this gas and liquid tightness. The capillary deep impregnation or sealing with dichtol HTR HS is resistant up to a maximum temperature of +500 °C. dichtol HTR HS is a concentrated 1 component system with a solids content of >98% and is therefore considered a solvent-free system according to VdL-RL04. The high percentage of solids promises permanent and reliable corrosion protection.

Characteristics

- Temperature resistance up to +500 °C
- Base silicone resin offers good electrical insulating properties
- High solids content >98%
- Fast curing at room temperature / No tempering or heating necessary!
- solvent-free system according to VdL-RL 04
- Easy application, ready to use
- Very good penetration behaviour (proven up to 80 % in LDS layers)

Typical applications

- Capillary deep impregnation of porous structures as well as micropores and hair cracks
- Impregnation of leaking castings and metallic structures
- Sealing of thermal coatings (LDS, APS, HVOF, etc.)
- Sealing of porous graphite and ceramic components

Available in the following versions

ARTICLE	PRODUCT	DESCRIPTION
#2530	dichtol HTR HS	1L, Special sizes on request

Product data condition of delivery

PORPERTIES	VALUE
Colour	Light yellow to orange (translucent). The colour variation does not affect the product quality.
Desnity	1,14 g/cm³
Viscosity	140 mPas
Grain size	No pigments / particles contained
Mixing ratio	1-component, no mixing required

PORPERTIES	VALUE
Curing at 20°C	• Surface dry after 15 min • Mechanically workable after 25 min • Chemically resistant after 60 min
Curing at 40°C	• Surface dry after 9 min • Mechanically workable after 15 min • Chemically resistant after 30 min
Complete curing	Fully resistant after 60 min at 200 °C or after 7 days at 20 °C
Processing temperature	+10 °C to +40 °C
Usage	1 litre for approx. 10 m²

Product data fully cured product

PORPERTIES	VALUE
Temperature resistance Permanent	500 °C
Dry film thickness	45 µm

Storage / shelf life

Store in the original, unopened container in a dry, cool and frost-free place (+5 °C to +30 °C).
Shelf life 1 year. Close the opened container as airtight as possible after use.

Processing

1. Preparation

Dirt residues, foreign bodies, grease and other substances must be completely removed from the pores to be sealed. Crack cleaning agents can negatively affect the penetration behaviour of the sealer. We recommend DIAMANT Cleaner #1417 for cleaning soiled surfaces.

2. Application

The product is a 1-component system. Please observe the processing temperatures specified in the technical data. Application on surfaces that are too warm can have a negative effect on the penetration behaviour of the sealer, as can application at temperatures that are too low.

The application options are briefly explained below. The choice of a suitable application method depends on the size and accessibility of the component surfaces to be sealed.

Brushing & spraying
Apply dichtol crosswise in 4 working steps at intervals of approx. 1 minute. Keep the surface moist for at least 5 minutes to ensure sufficient time for deep penetration.

Injecting & pouring
Fill the space to be sealed (e.g. blind hole, threaded hole, cooling channel, etc.) with dichtol and leave to act for at least 5 minutes. Then pour off excess material if necessary.

Dipping
Immerse the component to be treated in dichtol and remove after a reaction time of at least 5 minutes. Please ensure that the component drips off properly. It is recommended to move the component while dripping to prevent deposits of dichtol from forming in undercuts or cavities.

3. Curing

dichtol cures under room conditions and hardens in the presence of humidity. Curing can be accelerated by temperature.

Disposal

Do not empty into drains or water courses. Waste and containers must be disposed of in a safe manner. Disposal according to Directive 2008/98/EC on waste and hazardous waste. Proposal list of waste keys/waste names according to ECAC 080 111* Waste colours and varnishes containing organic solvents or other hazardous substances *Hazardous waste according to Directive 2008/98/EC (Waste Framework Directive). Non-contaminated and empty packaging can be recycled. Containers that are not emptied properly are hazardous waste.

Safety Data Sheet

Please read the relevant safety data sheet before processing the product. Safety data sheets are available on a daily basis on request via info@diamant-polymer.de or by telephone on +49-2166-98360.
DIAMANT guarantees the product properties as long as they are stored and used in accordance with the specifications listed here. DIAMANT accepts no responsibility for the processing of the material. Our technicians will be happy to answer any further questions you may have.

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