

dichtol HTR #0977

Product description

DIAMANT dichtol HTR is a specially developed, heat-resistant polymer-based impregnation system. dichtol HTR can be used to seal even the smallest pores down to 0.1 mm. This enables components to achieve a very high level of pressure tightness, even in difficult object structures. In the case of known local leaks, selective impregnation ensures efficient use of materials.

Characteristics

- Very high pressure tightness
- Corrosion and weather resistant
- Heat resistant up to 500°C
- Versatile application options through dipping, brushing, injecting, spraying

Typical applications

- Impregnation of metals, impregnation of castings and cast parts
- Sealing of thermally sprayed coatings (sealer for APS, HVOF, LDS, flame spraying)
- Infiltration of 3D printed components, additive manufacturing, generative manufacturing



Available in the following versions

ARTICLE	PRODUCT	DESCRIPTION
#0977	dichtol HTR	1 litre tin with resealable lid
#0977	dichtol HTR	5 litre canister with resealable HZ cap
Special sizes available on request		

Product data Delivery and processing condition

PROPERTIES	VALUE
Colour	Transparent
Density	0,89 g/m ³
Viscosity at +20°C	20 mPas

Product data, mixed

PROPERTIES	VALUE
Curing Surface drying	45 minutes at 20°C
Load capacity up to 5 mm wall thickness	1 hour after application, temper at +200°C for 1 hour
Load capacity 5 to 10 mm wall thickness	1 hour after application, temper at +200°C for 1 hour
Load capacity 10 to 15 mm wall thickness	1 hour after application, temper at +200°C for 1 hour
Load capacity > 15 mm wall thickness	1 hour after application, temper at +200°C for 1 hour
Processing temperature	+10°C to +40°C

Product data, cured

PROPERTIES	VALUE
Temperature resistance (permanent)	+ 500°C
Temperature resistance (short term)	+ 550°C
Colour	Transparent
Pore size	0 to 0,1 mm

Storage / Shelf life

Store in the original, unopened container in a cool, dry place (+5°C to +30°C). Shelf life: 24 months.

Processing / Preparation

Dirt residues, foreign bodies, grease and other substances must be completely removed from the pores to be sealed. We recommend DIAMANT Cleaner (item no. #1417) for cleaning dirty surfaces.

Application

The application can be carried out using the application methods listed below. The object temperature should not exceed 40°C, as otherwise the penetration of the polymer cannot be guaranteed 100%.

Application method: brushing & spraying

Apply dichtol in four steps at intervals of about one minute, working in a criss-cross pattern. Keep the surface moist for at least five minutes to allow sufficient time for deep penetration.

Application method: injecting & filling

Pour dichtol into the space to be sealed (e.g. blind hole, threaded hole, cooling channel, etc.) and leave to take effect for at least five minutes. Then pour off any excess material if necessary.

Application method: dipping

Immerse the component to be treated in dichtol and remove it after a minimum exposure time of five minutes. Please ensure that

the component is allowed to drain properly. It is recommended to move the component while it is draining to prevent deposits of dichtol from forming in undercuts or cavities.

Curing

dichtol HTR must be cured for 1 hour at a temperature of 200°C to achieve full curing.

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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The technical data listed here was determined under laboratory conditions and verified by quality assurance processes on the day of product manufacture. We reserve the right to make changes without prior notice. The customer is responsible for verifying the up-to-dateness of the data and should contact DIAMANT before ordering the material. Application, use and processing are beyond our control and are therefore the sole responsibility of the purchaser. Should liability nevertheless arise, this is limited to the value of the goods supplied by us and used by you. We guarantee the flawless quality of our products in accordance with our general terms and conditions of sale and delivery. All technical data vary depending on the loads and conditions of use. We will provide specific application data on request in each individual case.