

## **dichtol WFT high solid #0932**

### Product description

dichtol WFT high solid is a high-performance polymer that must be diluted for standard applications so that infiltration, impregnation or sealing of porous structures, layers and components is possible. The diluted dichtol WFT high solid penetrates porous structures and cracks independently and seals them permanently and reliably. The diluted product has a very high capillary activity and cures without the addition of heat under ambient conditions. It is applied atmospherically, i.e. without vacuum or pressure. The cured polymer fills the open pores or cracks and has good resistance to oils, lubricants and coolants. Undiluted, the product has a low capillary effect, but leaves a thick surface film.



### Characteristics

- Efficient material consumption thanks to selective application even with vagabond porosities
- Versatile application options by dipping, injecting, spraying or brushing
- Good chemical resistance, temperature-resistant up to + 190°
- Individually adjustable for application-specific viscosities

### Typical applications

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

### Available in the following versions and accessories

ARTICLE	PRODUCT	DESCRIPTION
#0932	dichtol WFT high solid	1 litre tin can with reclosable cap
#0932	dichtol WFT high solid	5 litre canister with reclosable HZ cap
#0932	dichtol WFT high solid	10 litre canister with reclosable cap
#0932	dichtol WFT high solid	200 litre barrel
#1285	Thinner for dichtol WFT high solid	This thinner can be used to adjust the viscosity of dichtol WFT high solid #0932
#1607	Viscometer	Measuring funnel for viscosity adjustment

## Product data delivery and processing state

PROPERTIES	VALUE
Colour	Transparent
Viscosity 20°C	900 mPas
Density 20°C	0,93 g/m <sup>3</sup>
Solids content (Festkörpergehalt)	43 %
Solvent	57 %
Refraction index 20°C	1,428

## Product data, diluted

PROPERTIES	VALUE
Possible dilution for 12 mPas	27 : 77 [#0932 : #1285]
Possible dilution for 34 mPas	58 : 42 [#0932 : #1285]
Application temperature	+5°C to +40°C
Surface drying 20°C	5 minutes
Full curing 20°C	24 hours
Consumption/yield	100 ml/m <sup>2</sup> at a dilution of 12 mPas
Consumption/yield	170 ml/m <sup>2</sup> at a dilution of 43 mPas

## Product data, fully cured

PROPERTIES	VALUE
Colour	Transparent
Temperature resistance	+ 190°C
Dry layer thickness	3 µm at dilution 12 mPas
Dry layer thickness	10 µm at dilution 43 mPas

## Storage / shelf life

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

## Processing / preparation

The desired viscosity can be adjusted with the thinner (Art. No. #1285). Undiluted, the product has a viscosity of 900 mPas. Typical viscosities for sealing porosities in foundry technology are 10 - 43 mPas. The viscosity can be adjusted with the DIAMANT viscometer (Art. No. #1607).

**The component/workpiece must be prepared as follows:**

Dirt residues, foreign objects, grease and other substances must be completely removed from the pores to be sealed. Crack sealants can negatively affect the penetration behaviour of the sealer. We recommend DIAMANT cleaner (Art. No. #1417) for cleaning soiled surfaces.

## Application

The product can be applied using the application methods listed below. Please observe the application temperatures specified in the technical data. Application on surfaces that are too warm or application at temperatures that are too low can have a negative effect on the penetration behaviour of the sealer.

### Application method Brushing & spraying

Apply dichtol crosswise in four steps at intervals of about one minute. Keep the surface moist for at least five minutes surface for at least five minutes to ensure sufficient time for deep penetration.

### Application method Injecting & filling

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

### Application method diving

Immerse the component to be treated in dichtol and remove after a reaction time of at least five 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.

## Curing

dichtol cures completely under room conditions. Curing can be accelerated by temperature.

## Waste disposal

Do not allow to enter the sewerage system or bodies of water. Waste and containers must be disposed of in a safe manner. Disposal in accordance with Directive 2008/98/EC on waste and hazardous waste. Suggested list of waste codes/waste designations according to EWC 080111\* Waste paint and varnish containing organic solvents or other hazardous substances \*Hazardous waste according to Directive 2008/98/EC (Waste Framework Directive). Non-contaminated and completely emptied packaging can be recycled. Containers that have not been properly emptied are hazardous waste.

## Safety data sheet

Please read the relevant safety data sheet before using the product. Safety data sheets are available on a daily basis on request via [info@diamant-polymer.de](mailto: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.

## Disclaimer

The following supersedes the Buyer's documents. Seller makes no express or implied representation or warranty, including merchantability or fitness for a particular purpose. Although the information and data in this publication are based on our own findings and are believed to be reliable, we can accept no responsibility for the suitability or results of further processing of the

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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.