

■ dichtol AM Hydro C #2509

Product description

dichtol AM Hydro C is a high-performance polymer that must be diluted for standard applications so that it can be used to infiltrate, impregnate or seal porous structures, layers and components. When diluted, dichtol AM Hydro C penetrates porous structures and cracks on its own, sealing them permanently and reliably. The diluted product has very high capillary activity and cures at room temperature without the need for heat. It is applied at atmospheric pressure, i.e. without vacuum or pressure. The cured polymer fills the open pores or cracks and has good resistance to oils, lubricants and coolants.

Characteristics

- Efficient material consumption through selective application, even with wandering porosities
- Versatile application options through dipping, injecting, spraying or brushing
- Good chemical resistance, temperature resistant up to +130°C
- Individually adjustable for application-specific viscosities

Typical applications

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



Available in the following versions

ARTICLE	PRODUCT	DESCRIPTION
#2509	dichtol AM Hydro C	1 litre, 250 litres, special sizes on request

Product data delivery condition

PROPERTIES	VALUE
Colour	Milky white
Density	1,05 g/cm ³
Viscosity	50 – 200 mPas
Curing at 20°C, surface dry	60 min
Curing at 20°C, completely dry	24 h
Processing temperature	5 – 50 °C

Product data, fully cured

PROPERTIES	VALUE
Colour shade	Colourless
Temperature resistance Permanent	130 °C
Dry film thickness	30 – 40 µm

Storage and shelf life

Store in the original, unopened container in a dry, cool and frost-free place (+5 °C to +30 °C).
Shelf life 24 months. Close the opened container as airtight as possible after use.

Processing / Preparation

The desired viscosity can be adjusted using the thinner (item no. #1285). Undiluted, the product has a viscosity of 900 mPas. Typical viscosities for sealing porosities in foundry technology are between 10 and 43 mPas. The viscosity can be adjusted using the DIAMANT viscometer (item no. #1607).

The component/workpiece must be prepared as follows:

Dirt residues, foreign bodies, grease and other substances must be completely removed from the pores to be sealed. Crack detection agents can have a negative effect on the penetration behaviour of the sealant. We recommend DIAMANT Cleaner (item no. #1417) for cleaning contaminated surfaces.

Application

The product can be applied using the methods listed below. Please observe the application temperatures specified in the technical data. Application on surfaces that are too warm, as well as application at too low temperatures, can negatively affect the penetration behaviour of the sealant.

Application method: brushing & spraying

Apply dichtol in four steps at intervals of about one minute, working in a criss-cross pattern. Keep the surface damp 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 again after a minimum exposure time of five minutes. Please ensure that the component is allowed to drain properly. It is recommended that the component be moved while draining 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 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.