

## ■ dichtol WFT UVT #2606

### Product description

DIAMANT dichtol WFT UVT is a single-component polymer mixture for sealing, infiltrating, and impregnating porous structures. It can be detected using UV light, thus ensuring its effectiveness.

ATTENTION: UV tracer can separate from the polymer during infiltration. The visibility of the UV tracer in ground samples is not a reliable criterion for the penetration depth of the sealant. We recommend our penetration depth function test for this purpose.

### Characteristics

- Ready to use, no mixing required
- Efficient material consumption thanks to selective application, even in cases of wandering porosity
- Versatile application options: dipping, injecting, spraying, or brushing
- Good chemical resistance
- Temperature resistant up to +130°C
- Approved for use with drinking water

### 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

ARTICLE	PRODUCT	DESCRIPTION
#2606	dichtol WFT UVT	1 litre, special sizes available on request

### Product data delivery condition

PROPERTIES	VALUE
Colour	transparent
Density	0,874 g/cm <sup>3</sup>
Viscosity	15-20 mPas
Curing at 20°C, surface dry	6 minutes
Curing at 20°C, complete	7 days
Mechanically workable	after 15 minutes
Chemically resistant	after 60 minutes

Curing at +40°C	Surface dry after 3 minutes Can be machined after 10 minutes Chemically resistant after 30 minutes
Processing temperature	10 °C to 40 °C
Yield	1 litre covers approx. 20 m <sup>2</sup>

## Product data, fully cured

PROPERTIES	VALUE
Colour	transparent
Absorption (λ-max)	at 232nm (UV)
Fluorescence (λ-max)	at 434nm (blue)
Permanent temperature resistance	180 °C
Short-term temperature resistance	200 °C
Dry film thickness	120 µm
Suitable for pore size	4 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.

## Verarbeitung

### 1. Preparation

The component to be sealed must be completely free of dirt, foreign matter (e.g. residual powder), grease and other deposits. We recommend using DIAMANT Cleaner #1417 for this purpose, provided that the printing material has sufficient chemical resistance. Shake the product well before use. During storage, the fillers may settle at the bottom of the can.

### 2. Application

This product is a single-component system. Please observe the processing temperatures specified in the technical data. Application on surfaces that are too warm or at temperatures that are too low can have a negative effect on the penetration behaviour of the sealant.

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. We recommend processing with commercially available paint spray systems with a nozzle size of 1.6 mm.

#### Immersing

This method is particularly suitable for small and complex components that need to be sealed evenly. Pour the sealer into a sufficiently large container and place the components to be sealed inside. After allowing it to take effect for approx. 5 minutes, remove the components and place them on a suitable surface to drain and dry.

#### Brushing

This method is particularly suitable for components that do not need to be sealed in all areas, as well as larger surfaces. Apply the sealant to the surface to be sealed using a suitable brush. Ensure that the sealant is left to work for at least 5 minutes. During this time, the surface must be kept constantly moist, so reapply the sealant several times if necessary.

### Spraying

This method is particularly suitable for components with very large surfaces that need to be sealed evenly. Use the ready-made spray bottle or a suitable paint spray gun and spray the sealant onto the surface to be sealed. To ensure a sufficient application time of at least 5 minutes, keep the surface moist by spraying it repeatedly.

### 3. Curing

The sealant cures physically in a few hours (approx. 1 hour per mm wall thickness). The sealant is dry on the surface after just a few minutes, so that the components can be moved again quickly. Curing at elevated temperatures in an oven is not necessary, but can significantly reduce the curing time.

### 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

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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.