

■ DWH 314 P #0409

Product description

DWH 314 P is a high-viscosity two component adjustment and adhesive coating on epoxy-resin basis with aluminium fillers, designed for form- and forcefitting filling and gluing of joints on components, assemblies of different materials. Due to spatula- and molding techniques it is possible to even achieve precision in μm -range. When using a micro-thin layer of DIAMANT-parting agent on the counter surface DWH 314 P can be separated from it. The result is an exact copy of the molded surface. A high-precision preparation of surfaces and the mechanical post-processing of the surfaces is not necessary. In modern production processing times and costs can be dramatically reduced.



Typical applications

- Form- and force-fitting installation of guides in mechanical engineering
- Adjusting coating for assemblies and elements of various materials.
- Full-surface lining of mouldings and elements as a replacement for feed plates.
- Load-bearing gap compensation on beams of portal milling and gantry systems
- μm - precise fitting of bushes, centering and guide elements
- Fixing and / or centering of bearing bushes according to high precision alignment
- As filling and composite material in 3D printing + Additive Manufacturing

Characteristics

- Very high accuracy, μm -accurate moulding
- Very high compressive strength
- Extreme dimensional stability after curing
- Excellent load transfer due to complete application of the contact surfaces
- Temperature resistant up to $+80\text{ }^{\circ}\text{C}$
- Excellent damping properties thanks to the E-module ca. 8300 N/mm^2
- mineral-anthracite color after curing
- High resistance against oils, cooling emulsions, mineral and synthetic coolants and lubricants and many other chemicals.

Chemical resistance

Please contact our technicians for questions about chemical resistance.

Pack sizes

Article	Description
DWK 1kg	

Custom sizes on request.

Product data condition of delivery

Hue component A (resin)	antracite
Component B (hardener)	clear
Mixing ratio	[A : B] (gr) 92 : 8
Pot life	50 minutes at 20°C
Curing complete	24 hours at 20°C
for deformation	18 hours at 20°C
Processing temperature	10°C to 30°C
Viskosität = pastös	

Product data (outreacted product)

Density	1.7 (g/cm ³)	
Compressive strength	156 (N/mm ²)	DIN EN 12190:1994
Strength	83	
E-Modul	8300 (N/mm ²)	DIN EN 13412:2006

temperature resistance (permanent)	-20 to +80 °C
------------------------------------	---------------

temperature resistance (short-term)	-40 to +125 °C
-------------------------------------	----------------

color after curing	mineral-antracite
--------------------	-------------------

Shrinkage	less than 0,1%
-----------	----------------

Storage / Shelf life

Store in original, unopened container in a dry, cool and frost-free place (+5°C to +20°C). Shelf life 2 years. Keep away from direct sunlight. Higher temperatures reduce the shelf life.

Preparation of the bonding surface

The surfaces to be coated should have a significant roughening to improve adhesion. The peak-to-valley height should be 0.5 mm (Rt = 500µm). The roughening can be produced, for example, with a cutter head with a large feed on a milling machine. Surfaces must be clean, dry and free of grease and oil. For cleaning dirty surfaces we recommend DIAMANT Cleaner #1417 or DIAMANT Cleaning Spray #1534. Surfaces to which DWH should not adhere should be coated with Release Agent #1354 or Release Spray #1355.

Mixing Procedure

To mix DWH 314 P, add Component B completely to the Component A container. Mix intensively with a drill and the DIAMANT mixing propeller (Prod. No. #0789) (max. 250 rpm for approx. 2 minutes). Scrape off any material adhering to the wall of the container with a spatula and add to the mixture. Mix again thoroughly. The deaeration described below also results in a final mixing.

Deaerate

Remove DWH 314 P from the container immediately after mixing and spread thinly, crosswise, on a clean sheet. By spreading, a further mixing effect is achieved, but in particular stirred-in air bubbles are broken up. Furthermore, a part of the reaction heat is dissipated by spreading over the surface, whereby the processing time is secured.

Description of use

First apply DWH 314 P with a trowel as a thin adhesive layer firmly onto the adhesive primer. Further trowel the product on the roof with a small excess without trapping air. The excess quantity applied should displace the air when moulding the components and thus ensure bubble-free application.

Disposal

Unused residual material from the cans can be disposed of normally when mixed in the correct ratio and fully cured (EAKV 170203). Unmixed material must be disposed of as chemical waste (EAKV

080111). When booking the DIAMANT service team, waste will be disposed of by us.

Qualification and service

It is recommended to have the application carried out by trained DIAMANT technicians.

- To ensure the best possible quality and error-free application, we offer the following services:
 - Consultation by telephone and / or on site
 - Site supervision and monitoring during the work on site
 - Complete execution of the work by our experienced application techniciansFurther information can be found in the service data sheet

Safety Data Sheet

Please read the appropriate safety data sheet before processing the product. Material Safety Data Sheets are available on a daily basis upon request via info@diamant-polymer.de or by phone +49-2166-98360. DIAMANT guarantees the product properties as long as they are stored and used according to the specifications listed here. DIAMANT does not assume any responsibility for the processing of the material. Our technicians will be happy to answer any further questions you may have.

Accessories / processing equipment

#1354 Release agent, liquid#1355 Release agent, spray 500 ml#1417 Cleaner, liquid#1534 Cleaner, spray 500 ml#78 Filler, DIAMOND green#0789 Mixing propeller#7010 Sponge rubber sealing tape HxW 10 x 15 mm#1580 Sponge rubber sealing tape HxW 4 x 9 mm

Disclaimer

The following supersedes the buyer's documents. Seller makes no express or implied representations or warranties, including merchantability or fitness for a particular purpose. Although the advice and information contained in this publication is based on our own findings and is believed to be reliable, we cannot accept any responsibility for the suitability or results of the processing of the products described herein, nor for any loss or damage caused directly or indirectly by the processing of our products. Before using the described products, the processor is obliged to ensure the quality, safety and other relevant properties by his own tests. We guarantee the flawless quality of our products in accordance with our General Terms and Conditions. The Buyer's sole remedy and the Seller's sole liability for any claims are the Buyer's purchase price. No reference in this document may be construed as an incentive, recommendation or permission to disregard existing intellectual property rights. When handling our products, the industrial hygiene and legal regulations must be observed. For further information, please refer to the relevant safety data sheets. This edition replaces all previous versions