Technical Data

316 P – Diamant # 2052

Product Description:

DWH 316 P is a putty precision alignment system for joint faces in machines and machine tools which reduces machining by using the molding technique. These technique allows an in-place molding to precision down to the micron with an exact replica of the tool surface. The material can be either caused to stick to the molding surfaces or released by the inclusion of a micro thin layer of release agent.

Typical Applications:

- All type of gantry machines
- Joints, spindle shafts, key slots
- Guide rails, bearing chairs and flanges, machine beds
- Bearing and index bushes

Properties:

- High Accuracy
- High load carrying capacity [160 N/mm^2]
- Excellent shock attenuation
- Full contact of mating surfaces and therefore good transmittal load
- High damping capacity
- Good adhesion with nearly zero aging
- Precision down to the micron without expensive machining or finishing work

Shelf Life:

Store in original, unopened container in a dry, cool and frost-free place (+5°C to +20°C).

Keep away from direct sunlight. Higher temperatures reduce the shelf life.

- 24 months

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Packing Size:

- 50-gram kit
- 100-gram kit
- 250-gram kit
- 500-gram kit
- 1,000-gram kit
- Custom kit size (available per customer request)

Application Instruction:

- **Preparation:**
  Roughen adhesion areas down to a roughness of 0,3 - ,05 mm (.012" - .020") and then clean chemically (optimum: Devitt cleaner).

- **Mixing:**
  Pour the hardener (Part B) fully into the resin (Part A) container. Mix manually or by machine (100 rpm for 5 minutes) until the hardener is mixed well with the resin. Ensure that material adhering to the side walls and the bottom is well incorporated.

- **Degas:**
  By pouring the mix in a long, thin, uninterrupted stream into a cartridge or the confined gap.

- **Application:**

  DWH 310 FL can be poured free flowing into the gap open at the top and of sufficient size. Alternatively, DWH 310 FL, after being transferred into a hand-held cartridge, can be injected through an inlet port into the prepared, sealed cavity. To avoid air pockets, the cavity is filled from the lowest point.

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Technical Data	Metric	Imperial
Pot life [min]	50 Minutes (+20°C)	50 Minutes (+68° F)
Curing time [Hr]	18 Hours (+20°C)	18 Hours (+68° F)
E-Modulus DIN 53457	8,200 N/mm^2	1,189,309 psi
Compressive Strength	145 N/mm^2	21,030 psi
Hardness	81 Shore D	654 Brinell
Surface Pressure	72.5 N/mm^2	10,515 psi
Adhesion Strength	15.5 N/mm^2	2,248 psi
Bending Strength	120 N/mm^2	17,405 psi
Thermal Conductivity	1,092 W/mK	.631 Btu/hr*ft*F
Coefficient of Friction	Info to Come	Info to Come

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Coefficient of Thermal Expansion	40 x 10^-6 K^-1	72 x 10^-6 F^-1
Temperature Resistance [Permanent]	-40°C up to 80° C	-40°F up to 176° F
Temperature Resistance [Temporary]	130°C	266°F
Viscosity	Putty	Putty
Specific Weight	1,9 g/cm^3	32 g/in^3
Mixing Ratio [by weight]	886:114 (grams)	31.25:4.02 (oz)

Technical Service:

Devitt Machinery Co. offers within the product application a comprehensive technical service, which ranges from the R&D over application consultancy, product training to the application by trained engineers. Please contact our hotline to get an individual offer.

Field Alignment Services & Training (F.A.S.T.) offers field services to perform applications of products and engineered solutions developed by Devitt Machinery Co.

Safety:

Read the appropriate safety data sheet before using the product and proceed accordingly. For questions, our service technicians are always available.