

RepaCoat PH

(former: ProCeramic)

PRODUCT DESCRIPTION

RepaCoat PH is a liquid or pasty 2-component Polymer-System with high quality ceramic fillers. It is characterized by good leveling properties and high abrasion resistance. Preferred application as wear protection of all materials, exposed to extreme wear by impacts of hard particles (like in gases, liquid media or bulk materials).

TYPICAL APPLICATIONS

- Extruder, ventilators
- Pipes (especially down pipes), chutes
- Container for bulk materials
- Exhaust systems (temperature limit)
- Centrifuges, cyclones
- Conveyor systems including screw conveyors
- All types of mixing machines (container and stirring device) etc.

PROPERTIES

- High wear protection at extreme abrasive exposures
- Filled with high-quality ceramic fillers and special, high wear resistant, massive balls
- High non-sag properties at all versions
- A layer thicknesses up to 1 cm can be applied in a one-step process at the more coarse grained versions.
- After curing the finer grained versions are viscoplastic

RANGE

Name	No.	Consistency	Spray
RepaCoat PH60 FL black	1491	liquid	Yes
RepaCoat PH60 FL grey	1591	liquid	Yes
RepaCoat PH100 P	1974	putty	No
RepaCoat PH800 FL/P	1913	soft putty	No
RepaCoat PH1000 P	1933	putty	No
RepaCoat PH2000 P	1934	putty	No

SHELF LIFE

- 12 months

PACKAGE SIZES (CPL.)

- 1kg, 5kg, 20kg (other sizes upon request)

PROCESSING

• Preparation

Roughen the surface by sand blasting (preferred) or grinding up to a roughness of 100 μ +/- 20 and clean with **DIAMANT Cleaner**

• Mix

Mix the two components intensively by using a propeller mixer at 250 rpm (small amounts can be mixed by hand). To avoid errors at mixing we recommend to use the complete service-pack.

• Application

First apply a thin adhesion layer with pressure. Then add the remainder up to the desired layer thickness.

• Curing

Within the curing time, the surface should be subsequently smoothed (ca. 1 - 2 h after mixing the material). This can be done with moistened hands (protected with liquid glove) or with a polyethylene foil being put onto the coating and smoothed with a roll. Smoother surfaces can be achieved by applying a surface layer of fine grained material from the RepaCoat PH-series.

For critical cases the adhesion can be improved by applying a bond layer of RepaCoat PH FL or MM Ceram 1930. Both materials contain very fine ceramic fillers. Each different formula can be coated layer by layer on top of each other. The ready mixed RepaCoat PH - Types can be mixed together to customize the right viscosity or graining.

Caution:

For trouble-free hardening the object temperature should neither remain under 5°C.



	60 FL #1491	60 FL #1591	100 P #1974	800 FL/P #1913	1000P #1933	2000P #1934
Color	black	grey		grey	grey	grey
Ball diameter [mm]				0,4-0,8	0,5 -1,0	1,0 – 2,0
Properties	9000mPas (liquid) sprayable	9000mPas (liquid) sprayable	putty	soft paste- like, excellent smoothing	paste-like, good smoothing, strengthened polymer matrix, filled with extra hard balls	paste-like, good smoothing, strengthened polymer matrix, filled with extra hard balls
Mixing ratio (by weight) [g]	5,4: 1	5,4: 1	2,85:1	78:22 3,5: 1	78 : 22 3,5 : 1	75 : 25 3 : 1
Mixing ratio (by volume) [ml]	3:1	3:1	2,25:1	3,7 : 1	3,6 : 1	3 : 1
Specific weight [g/cm ³]	1,63	1,63	1,8	2,1	2,1	2,1
Pot life (+20°C) [Min]	~35	~35	~25	~45	~45	~45
E-Modul DIN 53457 [N/mm ²]				4800	5400	6000
Compressive strength [N/mm ²]	100	100	100	105	115	115
Bending strength [N/mm ²]				60	74	78
Tensile strength [N/mm ²]	30	30	30	35	38	41
Curing (full load) [h]	24 (48)	24 (48)	24 (48)	24 (48)	24 (48)	24 (48)
Hardness (after 24 h) [Shore D]	82	82	83	>85	>85	>85
Temperature resistance (°C) [long term]	140	140	140	150	150	150
Temperature resistance (°C) [short term]	200	200	200	200	200	200

SPECIAL APPLICATIONS FOR THE DIFFERENT VERSIONS

To achieve a smooth and homogeneous surface, apply the finer grained versions (especially #1913).

The more coarse-grained versions (especially #1934) are applied for back filling at extreme abrasion, cavitation damage and wear from rough particles. The run resistance is so high that a layer thickness of 1cm can be applied in a one-step process

After curing the products #1913 and #1867 are visco-plastic, which is very beneficial for machine-tools subject to high vibration levels.

The remaining RepaCoat PH - versions have higher strengths to optimize the wear protection under extreme abrasive conditions.

All material values are average values and vary due to mixing ratio, material quantity and environmental conditions. The mentioned material values are based on normal conditions (STP) of 20°C (273K / 31,73°F) and 1013mbar (1013hPa).