

Lapping and polishing slurries



Water-based diamond suspension

OPW



Suspensions are available in customer-tailored formulations in a wide range of viscosities, diamond types, grit sizes and concentrations.



Diamond suspensions are used with various lapping and polishing pads. We are happy to assist you in finding the best suitable products.

Diamond suspension for polishing optical lenses

This water-soluble, ready-to-use diamond suspension was designed for the final polishing of optical components, ceramics and metals. OPW suspensions are optimized for highest performance of finishing processes from 3 micron down to 0.1 micron. Adapted OPW formulations are available for polishing on pads or pitch plates/PU-foils.

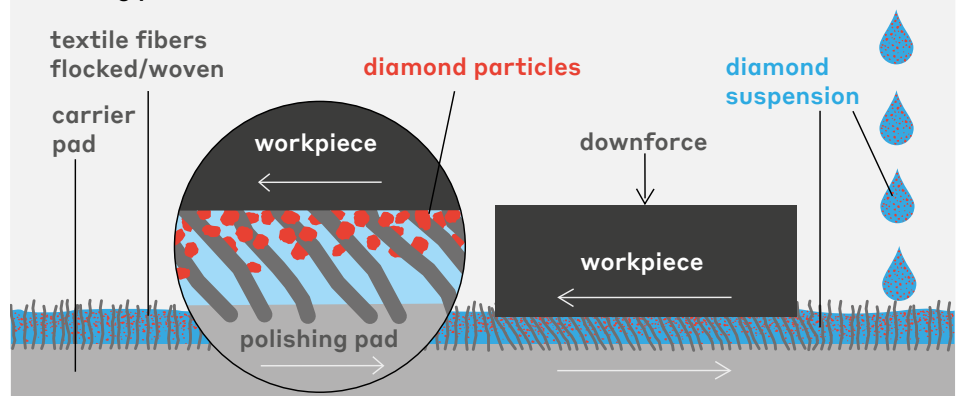
Properties

Carrier liquid water-soluble
 Typical application polishing of optical lenses of various materials with submicron diamond sizes
 Density 1.04 g/cm³

Suspension type	Viscosity	Stability	pH value	Remarks
OPW-10	200 cP	stabilized	7.0	Pitch plate or PU-foil
OPW-20	325 cP	stabilized	8.0	Textile polishing pad
OPW-21	250 cP	stabilized	8.0	Double-side polishing

OPW-10 can be used in combination with lubricant Yellow or Yellow-S to improve lubrication and cooling or to buff out at the end of the polishing process.

Polishing process illustration



Order example

OPW-10/25 DP 0-0.2 micron
Quantity 5 ltr
Packing unit 1 ltr

Packing

Bottles 1 ltr, 2.5 ltr
Containers 5 ltr, 10 ltr
If not specified,
1 liter bottles are filled.

Units

Liter (ltr)

Contact

sales@pureon.com
www.pureon.com/sales-contacts

Order information

Example product code OPW-10/25 DP 0.25-0.5 micron
① ② ③

① Suspension type

② Diamond concentration cts/ltr

③ Diamond type/size

OPW highlights

- Highly tailor-made: select any diamond type, grit size and concentration.
- Good cooling and lubrication properties.
- User-friendly thanks to stabilized formulation.
- Environmentally friendly and easy to clean.
- Scratch-free polishing also in submicron range.
- Guaranteed agglomerate-free.



Additional types and sizes for customized specifications can be found on www.puron.com/products/overview

Examples

Suspension type/diamond concentration

Suspension type	Diamond concentration ¹	Diamond concentration ¹	Diamond concentration ¹
	Low 15 cts/ltr	Medium 25 cts/ltr	High 50 cts/ltr
OPW-10	OPW-10/15	OPW-10/25	OPW-10/50
OPW-20	OPW-20/15	OPW-20/25	OPW-20/50
OPW-21	OPW-21/15	OPW-21/25	OPW-21/50

¹ Other diamond concentrations between 10 and 500 cts/ltr available.

Diamond type/size

Diamond grit size	Polycrystalline diamond ²	Monocrystalline diamond ²
0.025 micron	DP 0-0.05 micron	MSY 0-0.05 micron
0.05 micron	DP 0-0.1 micron	MSY 0-0.1 micron
0.10 micron	DP 0-0.2 micron	MSY 0-0.2 micron
0.25 micron	DP 0-0.5 micron	MSY 0-0.5 micron
0.35 micron	DP 0.25-0.5 micron	MSY 0.25-0.5 micron
0.5 micron	DP 0.25-0.75 micron	MSY 0.25-0.75 micron
0.75 micron	DP 0.5-1.0 micron	MSY 0.5-1.0 micron
1 micron	DP 0.75-1.25 micron	MSY 0.75-1.25 micron
3 micron	DP 2.5-4 micron	MSY 2.5-4 micron

² Other diamond types/sizes available.

Lubricant

Lubricant type ³	Base	pH value	Remarks
Yellow	water/alcohol-soluble	9.0	to be used with polishing pads
Yellow-S	water/alcohol-soluble	6.5	to be used with pitch plates

³ Other lubricants available.