



Highlights

- Highly tailor-made: select any diamond type, grit size and concentration
- User-friendly thanks to stabilized formulation
- High removal rate due to tailored additives
- Good lubrication
- Tight particle size distribution

Oil-based diamond suspension

SPO

Oil-based ready-to-use diamond suspension for highest performance in lapping and polishing of sapphire, ceramics and metals. Tailored additives provide maximum material removal rate (MRR) while extending the process window for best performance. SPO diamond suspensions feature up to 25 % higher material removal rate compared to other oil suspensions. Novel stabilizers prevent precipitation of the diamond particles and thus help to enhance process stability. For application in machines with stirring units the suspension is available without stabilizers.

Typical lapping plate

metal lapping plate

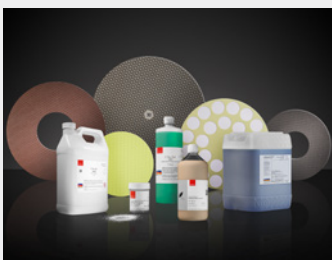
Suspension type	Viscosity	Stability	Remarks
SPOT-42	12 cP	stabilized	only for diamond size < 1 µm
SPO-42	30 cP	stabilized	
SPO-45	4 cP	easy-shake	
SPO-410	300 cP	stabilized	



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.



Pureon offers a wide range of customized solutions. More information can be found on www.pureon.com/products/overview

Product specifications

Carrier liquid oil-based
 Typical lapping plate metal lapping plate
 Density 0.8 – 0.9 g/cm³
 Shelf life 2 years

Order information

Order code SPO-410/25 DP 1.5 – 2.5 micron
 Packing Bottles 1ltr, 2.5 ltr, Containers 5 ltr, 10 ltr
 If not specified, 1 liter bottles are filled.
 Units Liter [ltr]

Examples

Suspension type/diamond concentration

Suspension type	Diamond concentration ¹ Low 15 cts/ltr	Diamond concentration ¹ Medium 25 cts/ltr	Diamond concentration ¹ High 50 cts/ltr
SPOT-42	SPOT-42/15	SPOT-42/25	SPOT-42/50
SPO-42	SPO-42/15	SPO-42/25	SPO-42/50
SPO-45	SPO-45/15	SPO-45/25	SPO-45/50
SPO-410	SPO-410/15	SPO-410/25	SPO-410/50

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

Diamond type/size

Diamond grit size	Polycrystalline diamond ²	Monocrystalline diamond ²
0.25 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
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
6 micron	DP 5.5 – 8 micron	MSY 5.5 – 8 micron
9 micron	DP 8 – 12 micron	MSY 8 – 12 micron
15 micron	DP 10 – 20 micron	MSY 10 – 20 micron
30 micron	DP 20 – 30 micron	MSY 20 – 40 micron

² Other diamond types/sizes available.

Contact

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