



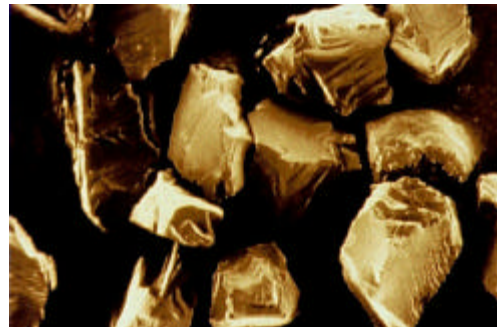
Diamond Suspensions and Pastes



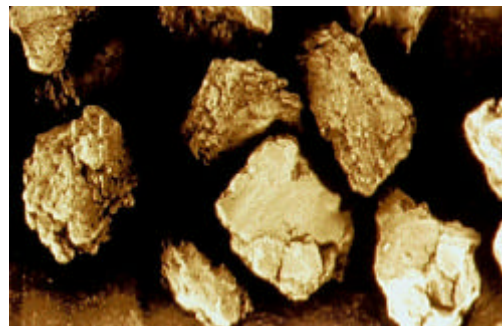
Diamond Size (um)	Color code
0.10	Charcoal
0.25	Gray
0.50	White
1.0	Blue
3.0	Green
6.0	Yellow
9.0	Red
15	Brown
30	Orange
45	Purple

Polycrystalline diamond is a synthetic diamond which provides better surface finishes and higher removal rates than monocrystalline diamond. Some of the more important features and advantages of polycrystalline diamond include the following:

- Higher cutting removal rates (self-sharpening abrasive)
- Very uniform surface finish
- More uniform particle size distribution
- Harder/ tougher particles
- Blocky shaped particles
- Hexagonal microcrystallites (equally hard in all directions)
- Extremely rough surface (more cutting points)
- Surface area 300% greater than monocrystalline diamond
- No abrasion-resistant directionality (abrasion independent of particle orientation)



Monocrystalline blocky diamond



Polycrystalline multi-faceted diamond

Polycrystalline Diamond Paste

Description	Quantity	Part Number
DIAMAT™ Polycrystalline diamond paste (0.10-micron)	5 gm 20 gm	PC-02 10-05 PC-02 10-20
DIAMAT™ Polycrystalline diamond paste (0.25-micron)	5 gm 20 gm	PC-02 25-05 PC-02 25-20
DIAMAT™ Polycrystalline diamond paste (0.50-micron)	5 gm 20 gm	PC-02 50-05 PC-02 50-20
DIAMAT™ Polycrystalline diamond paste (1-micron)	5 gm 20 gm	PC-20 01-05 PC-20 01-20
DIAMAT™ Polycrystalline diamond paste (3-micron)	5 gm 20 gm	PC-20 03-05 PC-20 03-20
DIAMAT™ Polycrystalline Diamond Paste (6-micron)	5 gm 20 gm	PC-20 06-05 PC-20 06-20
DIAMAT™ Polycrystalline Diamond Paste (9-micron)	5 gm 20 gm	PC-20 09-05 PC-20 09-20
DIAMAT™ Polycrystalline Diamond Paste (15-micron)	5 gm 20 gm	PC-20 15-05 PC-20 15-20
DIAMAT™ Polycrystalline Diamond Paste (30-micron)	5 gm 20 gm	PC-20 30-05 PC-20 30-20

Diamond Extenders (Lubricants)

Description	Quantity	Part Number
DIALUBE™ Diamond Extender	16 oz (475 ml) 32 oz (950 ml) 64 oz (1.9 l)	DL-3000-16 DL-3000-32 DL-3000-64

Polycrystalline Diamond Suspensions

Description	Type	Part Number
DIAMAT™ Polycrystalline Diamond Suspension (0.10-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-01 10-250 PC-01 10-500
DIAMAT™ Polycrystalline Diamond Suspension (0.25-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-01 25-250 PC-01 25-500
DIAMAT™ Polycrystalline Diamond Suspension (0.50-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-01 50-250 PC-01 50-500
DIAMAT™ Polycrystalline Diamond Suspension (1-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 01-250 PC-10 01-500
DIAMAT™ Polycrystalline Diamond Suspension (3-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 03-250 PC-10 03-500
DIAMAT™ Polycrystalline Diamond Suspension (6-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 06-250 PC-10 06-500
DIAMAT™ Polycrystalline Diamond Suspension (9-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 09-250 PC-10 09-500
DIAMAT™ Polycrystalline Diamond Suspension (15-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 15-250 PC-10 15-500
DIAMAT™ Polycrystalline Diamond Suspension (30-micron), water-based	250 ml (8.4 oz) 500 ml (16.8 oz)	PC-10 30-250 PC-10 30-500