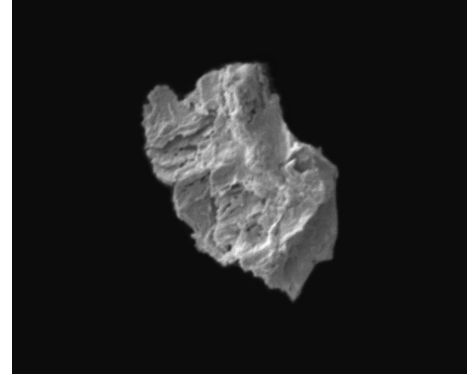




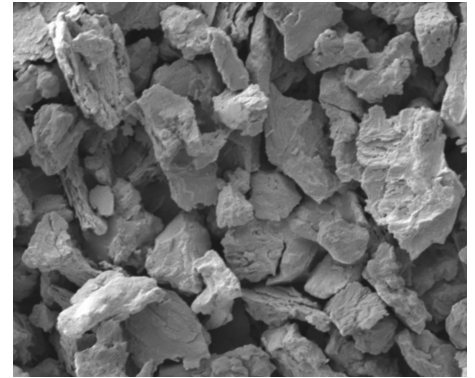
Polycrystalline Diamond Powder - NPE

NPE is produced through explosion synthesis, is a high-quality, high-performance micron diamond powder. Because there is no fracture surface, and its strength is relatively high, it suits a greater pressure grinding or polishing. Polycrystalline diamond powder NPE fits for most grinding and polishing occasions.



Characteristics

Polycrystalline diamond powder particles have a rough surface that provides multiple points of contact between the particle and the workpiece, with good self-sharpening, it can significantly improve the material removal rate. While maintaining a high cutting ability, it can achieve a high-precision polishing effect and is not prone to scratches. The NPE has high wear resistance and a long service life.



Application

- ◆ Semiconductor processing: silicon wafers, germanium, gallium arsenide, indium phosphide, silicon carbide, gallium nitride and other semiconductor materials.
- ◆ Sapphire processing: sapphire substrates, LED chips, optics lens, watch or clock glass, mobile phone fingerprint recognition films, etc.
- ◆ Ceramic and Metal processing: ceramic materials such as zirconia ceramic special-shaped parts, aluminum nitride substrates, mobile phone ceramic covers, watch ceramic structural parts, stainless steel, aluminum parts, copper parts, mold steel, mobile phone backplane, and other super hard alloy metal materials.
- ◆ Grinding liquid and pads: cooperate with diamond suspension & slurry or diamond pads manufacture.





Standard Size Range



Order Number	Item Name	Grit Size micron	Median (D50) micron	Median Tolerance micron	Upper limit (D99) micron
1.03.00001	NPEM	0-0.02	0.012	0.0115~0.0125	0.0234
1.03.00002	NPEM	0.02-0.04	0.025	0.024~0.026	0.0488
1.03.00003	NPEM	0.04-0.07	0.05	0.048~0.052	0.098
1.03.00004	NPEM	0.06-0.1	0.075	0.072~0.078	0.146
1.03.00005	NPEM	0.06-0.15	0.09	0.087~0.094	0.176
1.03.00006	NPEM	0.1-0.2	0.125	0.12~0.13	0.244
1.03.00007	NPEM	0.15-0.25	0.18	0.173~0.187	0.351
1.03.00008	NPEM	0.15-0.3	0.21	0.202~0.218	0.41
1.03.00009	NPEM	0.25-0.5	0.35	0.337~0.364	0.683
1.03.00010	NPEM	0.35-0.75	0.5	0.481~0.52	0.975
1.03.00011	NPEM	0.35-0.85	0.55	0.529~0.572	1.073
1.03.00012	NPEM	0.5-1	0.71	0.68~0.74	1.38
1.03.00013	NPEM	0.75-1.5	0.9	0.87~0.94	1.76
1.03.00014	NPEN	0.8-1.5	1	0.96~1.04	1.95
1.03.00015	NPEN	1-1.5	1.1	1.06~1.14	2.15
1.03.00016	NPEN	1-1.75	1.19	1.14~1.24	2.32
1.03.00017	NPEN	1-2	1.42	1.37~1.48	2.77
1.03.00018	NPEN	1.25-2.25	1.69	1.63~1.76	3.3
1.03.00019	NPEN	1.5-2.75	2.12	2.04~2.2	4.13

NPE Diamond Powder Datasheet 2023-08-31

Order Number	Item Name	Grit Size micron	Median (D50) micron	Median Tolerance micron	Upper limit (D99) micron
1.03.00020	NPEN	1.5-3	2.25	2.16~2.34	4.39
1.03.00021	NPEN	2-3	2.39	2.3~2.49	4.66
1.03.00022	NPEN	2.25-3.5	2.84	2.73~2.95	5.54
1.03.00023	NPEN	2.5-4	3.1	2.98~3.22	6.05
1.03.00024	NPEN	2.5-4.5	3.37	3.24~3.5	6.57
1.03.00025	NPEN	3-4.5	3.75	3.61~3.9	7.31
1.03.00026	NPEN	3-5	4	3.85~4.16	7.8
1.03.00027	NPEN	3-6	4.5	4.33~4.68	8.78
1.03.00028	NPEN	3.5-6	4.75	4.57~4.94	9.26
1.03.00029	NPEN	4-7	5.5	5.29~5.72	10.73
1.03.00030	NPEN	4.5-7.5	6	5.77~6.24	11.7
1.03.00031	NPEN	5-8	6.5	6.25~6.76	12.68
1.03.00032	NPEN	5.5-9	6.8	6.54~7.07	13.26
1.03.00033	NPEN	5-10	7	6.73~7.28	13.65
1.03.00034	NPEN	6-10	7.5	7.21~7.8	14.63
1.03.00035	NPEN	7-10	8.1	7.79~8.42	15.8

+ Other diamond types /sizes available.

Packing

100, 1000 or 5000 carats.

Unless specified, orders will be sent in bulk packing units.

All information is non-binding and provided for information purposes only. Subject to change without notice.