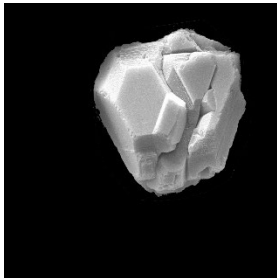


SYNDIA® SYV

MULTICRYSTALLINE MICRON DIAMOND POWDER

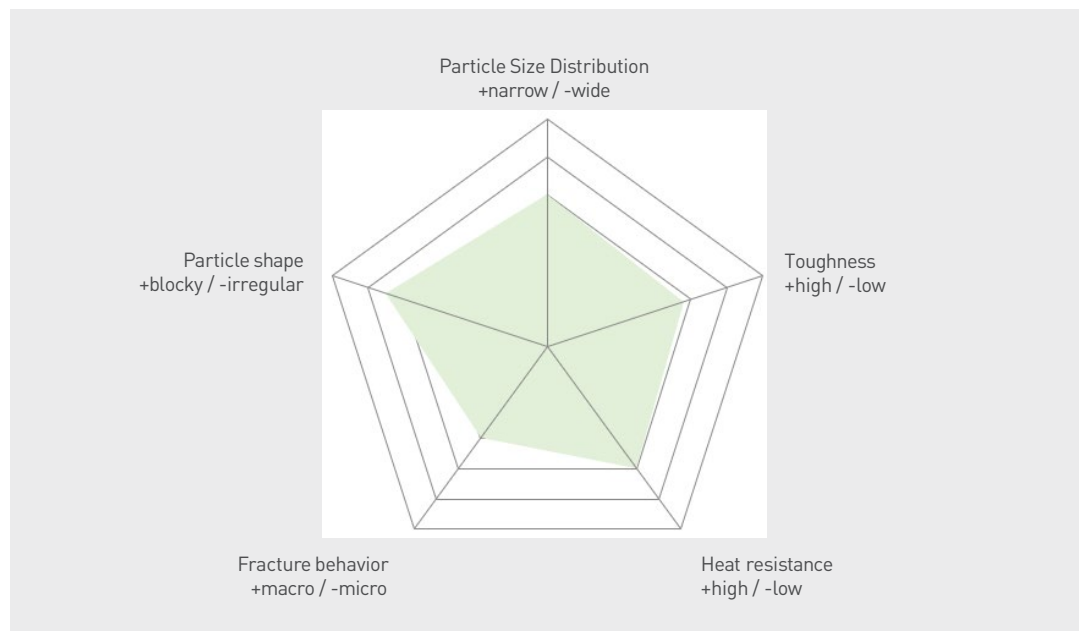


SYNDIA® SYV | HIGH TOUGHNESS LOW FRIABILITY

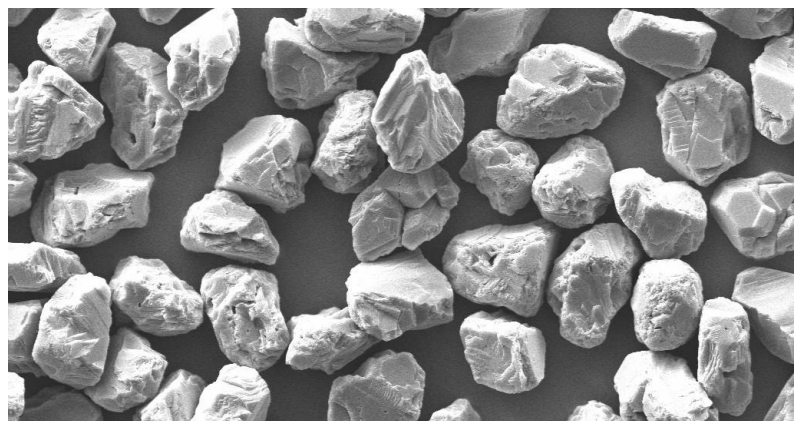
SYV consists of multi-crystalline particles with high toughness and a high level of heat resistance. SYV is therefore extremely suitable for ceramic bonds. Despite its high toughness level, it is remarkably self-sharpening. It is recommended for the machining of difficult to grind technical ceramics, like Sapphire, Silicon Carbide and Silicon Nitride, with ceramic bonded tools.

Van Moppes guarantees consistent quality by control of raw material, production process and unique inspection method.

PRODUCT CHARACTERIZATION



PROPERTIES	SYV
GRADING	precision
SYNTHESIS	HPHT
CRYSTAL STRUCTURE	multi-crystalline
PARTICLE SHAPE	semi-blocky
FRACTURING MODE	micro-fracture
IMPACT RESISTANCE	low to medium
PURITY	> 99.5%
BONDING SYSTEMS	PH, PO, VI, MB
DENSITY	3.52 g/cm ³



SYNDIA® SYV

MULTICRYSTALLINE MICRON DIAMOND POWDER

MID-POINT	SYV	MESH EQUIVALENT	FEPA EQUIVALENT
53.0	SYV 40-60		MD63
46.0	SYV 40-50	#500	
41.0	SYV 35-45		
36.0	SYV 30-40	#600	MD40
32.5	SYV 30-40F		
29.0	SYV 22-36	#700	
24.0	SYV 20-30	#800	MD25
19.0	SYV 15-25	#1000	
16.0	SYV 12-22	#1100	MD16
14.0	SYV 10-20	#1200	
12.0	SYV 8-16	#1400	
9.50	SYV 8-12	#1500	MD10
8.00	SYV 6-12	#1800	
6.80	SYV 5-10	#2200	
5.70	SYV 4-8	#3000	MD6.3
4.80	SYV 4-6	#5000	
4.00	SYV 3-6	#6000	
4.00	SYV 3-5	#6000	MD4.0
3.00	SYV 2-4	#8000	
2.40	SYV 2-3		
2.00	SYV 1-3		
1.41	SYV 1-2		MD2.5