

frits for grinding tools

Chemical analysis														Dilatometer and heating microscope			
	Li ₂ O	Na ₂ O	K ₂ O	MgO	CaO	BaO	ZnO	Al ₂ O ₃	B ₂ O ₃	SiO ₂	ZrO ₂	TiO ₂	F ₂	TEC *10 ⁻⁷	BM °C	MP °C	Application
A 2120 p		24	2		7			4		59			4	145	660	840	universal
A 3021 p					10			10	26	51	3			42	1060	1140	synthetic Al ₂ O ₃ , CBN
A 3022 p		7		5	9			12	25	43				68	790	890	universal
A 3069 p	2			3				9	29	57				40	810	1120	additional for CBN and Diamond
A 3158 p		8			3			2	36	51				55	800	855	universal, CBN
A 3381 p		23			3				11	55		8		108	690	760	universal
A 3390 h		3	5		8			14	10	60				57	910	1270	Al ₂ O ₃ , SiC low temperature
A 3391 h		11			8			12	14	55				75	800	920	Al ₂ O ₃ , SiC low temperature
A 4015 p	4	16							37	43				96	640	695	Diamond and universal
A 8962 p		16							37	47				86	710	760	universal and SiC low temperature
A 8969 p		13	7					13	28	40				88	720	820	universal
VO 5980 s		6	8		2			13	10	61				75	820	1120	synthetic Al ₂ O ₃
VO 5988 p		12	19	8	4	2		7	22	26				126	620	820	universal

fineness "s" = 97 % < 40 μm | fineness "p" = 97 % < 63 μm | fineness "h" = 97 % < 71 μm

TEC = thermal expansion coefficient between 20 and 400 °C | BM = beginning of melting | MP = melting point | n.b. = not measured

ceramic bonds for grinding tools

Chemical analysis														Application temperature	
	Li ₂ O	Na ₂ O	K ₂ O	MgO	CaO	BaO	ZnO	Al ₂ O ₃	B ₂ O ₃	SiO ₂	ZrO ₂	TiO ₂	F ₂	°C	Application
VO82035		○	○	○	○			○	○	○				1200 - 1300	Al ₂ O ₃
VO82036		○	○		○			○	○	○				1200 - 1300	Al ₂ O ₃
VO82065		○						○	○	○				900 - 1000	Al ₂ O ₃
VO82075	○	○			○			○	○	○				1000 - 1050	Al ₂ O ₃
VO82037		○	○					○	○	○				1200 - 1300	SiC
VO82038		○	○					○		○				1200 - 1300	SiC
VO82077		○	○					○	○	○				800 - 900	SiC
VO82067		○	○	○			○	○	○	○				800 - 900	SiC
VO82056		○			○			○	○	○				850 - 1000	CBN
VO82068	○	○	○	○	○			○	○	○				800 - 950	CBN
VO82048	○	○	○					○	○	○				700 - 800	Diamond

fineness 97 % < 63 μm