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STRUCTURAL CERAMICS RANGE

Helping you improve yields and increase productivity

Structural Ceramics Range

Minerals used in the production of structural ceramics perform a variety of roles, from improving drying behaviour and end-product strengths through to frost resistance and aesthetic surface finishes.

This often requires specialised augmenting clays to improve and support local raw materials. Our diverse product portfolio features additives, colourants, minerals and prepared engobes suitable for all main structural applications.

Clays

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis (unfired) %						"Modulus of Rupture vac. extruded (dried @110°C) MPa"	Residue %> (wet)	Particle Size %< (Sedigraph)		Water absorption		Recommended Application				
					SiO_2	Al_2O_3	Fe_2O_3	TiO_2	Alkalis	LOI		63µm	10µm	2µm	1100°C	1200°C	Facing Bricks	Backing Bricks	Rooftiles	Stoneware Pipes	Engobes
W	DE	plastic clay	shredded	white	69.9	19.5	0.9	1.3	2.4	5.7	4.1	5.0	-	54	-	-					
K	DE	plastic clay	shredded	light creme	72.0	18.0	1.0	1.4	2.2	5.4	5.9	7	73	49	-	-					
LED	DE	plastic clay	shredded	leather	67.3	18.8	3.5	2.3	1.7	6.3	-	6	-	60	10.6	4.1					
RB/2a	DE	plastic clay	shredded	red-brown	57.8	21.3	7.1	1.2	2.8	7.1	7.0	1	90	72	-	-					
RB/3a	DE	plastic clay	shredded	light brown	66.0	18.5	5.0	1.1	2.4	5.0	5.1	5	80	61	-	-					
RB/4a	DE	plastic clay	shredded	light red	66.6	19.3	3.4	1.2	2.3	6.3	4.9	3	78	59	-	-					
202	DE	plastic clay	shredded	beige	67.4	19.2	3.9	1.3	2.2	5.5	4.5	2	80	60	-	-					
SC	DE	slate clay	shredded	red	59.0	20.9	8.5	0.9	4.1	4.9	3.3	11	-	-	-	-					
201 hell	DE	plastic clay	shredded	creme	76.8	14.6	1.2	1.3	1.9	4.1	3.8	5	67	46	-	-					
201/2 rot	DE	plastic clay	shredded	rose	71.0	18.5	2.0	1.3	2.2	4.8	4.0	4	80	53	-	-					

Kaolins

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis (unfired) %						Modulus of Rupture extruded (dried @110°C) MPa"	Residue %>	Particle Size %<		Recommended Application				
					SiO_2	Al_2O_3	Fe_2O_3	TiO_2	Alkalis	LOI		63µm	10µm	2µm	Facing Bricks	Backing Bricks	Roof Tiles	Stoneware Pipes	Engobes
RK H	DE	raw kaolin	shredded	white	70.7	19.6	0.8	0.3	0.1	6.8	-	13		40					
Kerasan	DE	clay/kaolin refined	noodle	light grey	70.0	20.2	0.8	0.4	0.6	7.4	5.0	0.1	90	47					
KD/KDG	CZ	kaolin refined	noodle	white	52.9	32.5	0.8	0.4	1.2	11.6	4.3	0.1	96	56					

Sand

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis %						"Modulus of Rupture extruded (dried @110°C) MPa"	Particle Size d50	Particle Size % >		Recommended Application				
					SiO_2	Al_2O_3	Fe_2O_3	TiO_2	Alkalis	LOI		µm	1mm	250µm	Facing Bricks	Backing Bricks	Roof tiles	Stoneware Pipes	Engobes
Moist silica sands (particle size)																			
0,1-0,3	NL	sand	washed	-	95.2	2.0	0.6	0.3	-	0.3	-	200	0	20					
0,1-0,4	NL	sand	washed	-	96.9	1.0	0.7	0.1	-	0.2	-	260	0	45					
0,1-0,5	NL	sand	washed	-	97.5	0.8	0.6	0.1	-	0.1	-	340	0	68					
dried & calibrated silica sands (particale size)																			
0,2-1,0	NL	sand	dried	-	99.1	0.4	0.1	0.0	-	0.1	-	600	15	95					
1,0-2,0	NL	sand	dried	-	99.1	0.4	0.1	0.0	-	0.1	-	1500	98	100					
1,7-2,5	NL	sand	dried	-	98.4	0.6	0.1	0.0	-	0.1	-	2100	100	100					
2,0-4,0	NL	sand	dried	-	98.4	0.6	0.1	0.0	-	0.1	-	2700	100	100					

Feldspar

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis %						"Modulus of Rupture extruded (dried @110°C) MPa"	Residue %>	Particle Size %<		Recommended Application				
					SiO_2	Al_2O_3	Fe_2O_3	TiO_2	Alkalis	LOI		63µm	10µm	2µm	Facing Bricks	Backing Bricks	Roof Tiles	Stoneware Pipes	Engobes
K-Feldspar	DE/NO/ TR	feldspar	crushed, powdered	-	66	18	0.04	-	12	-	-	various	various	various					
Na-Feldspar	DE/NO/ TR	feldspar	crushed, powdered	-	70	18	0.05	-	10	-	-	various	various	various					
Nepheline Syenite	DE/NL/NO	nepheline	crushed, powdered	white	55	24	0.1	-	8.2 / 8.8	-	-	various	various	various					

Additives

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis %						"Modulus of Rupture extruded (dried @110°C) MPa"	Residue %>	Particle Size %<	Recommended Application			
					MnO_2 Equivalent	Mn_3O_4	Mn total	Fe Equiva-lent	Cr	LOI		45µm		Facing Bricks	Backing Bricks	Roof Tiles	Engobes
Mangalox A&C	NL	manganese	powdered	brown/black	69/67	-	-	-	-	-	-	1	various				
Mangalox H (Mn_3O_4)	NL	hausmannite	powdered	brown/black	-	96	-	2.2	-	-	-	-	various				
Portafer H	NL	iron oxide	powdered	light red	-	-	0.6	96.5	-	-	-	-	various				
Portafer G	NL	iron oxide	powdered	light red	-	-	-	94	-	-	-	-	various				
Portachrom	NL	chromite	powdered	light-dark grey	-	-	-	-	45	-	-	-	various				
Mangalox AS	NL	manganese	slurry	brown / black	69	-	-	-	-	-	-	1	various				
Mangalox HAS	NL	manganese	slurry	brown / black	-	-	57	-	-	-	-	-	various				
Mangalos HS	NL	hausmannite	slurry	brown / black	-	96	-	-	-	-	-	-	various				
Portachrom AS	NL	chromite	slurry	light-dark grey	-	-	-	-	45	-	-	-	various				

Engobes

Product	Country of Origin	Mineral Type	Delivery Form	Firing Colour	Chemical Analysis						"Modulus of Rupture extruded (dried @110°C) MPa"	Residue %>	Particle Size %<		Recommended Application			
					SiO_2	Al_2O_3	Fe_2O_3	TiO_2	Alkalis	LOI		63µm	10µm	2µm	Facing Bricks	Backing Bricks	Roof Tiles	Engobes
RA	DE	clay	powdered	red	57.0	21.1	10.2	1.2	2.6	7.3	7.8	2.2	91	75				
Engopal 100	DE	clay	powdered	red	53.6	19.2	8.7	0.9	9.1	8.5	-	1.5	90	79				
Red Roof	DE	ready prepared	spray-dried	red	59.5	21.0	9.5	1.0	9.0	7.5	-	< 80µm	-	-				
161	DE	clay	powdered	creme	68.3	25.5	1.1	1.4	3.5	7.0	-	2.0	88	67				
Kerasan	DE	clay/kaolin	powdered	white	65.5	21.5	0.6	0.5	0.7	7.9	4.0	0.1	90	47				
KDG, KD2000	CZ/DE	kaolin	powdered	white	51.3	33.5	0.7	0.5	1.2	12.4	3.9	0.1	97	60				

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