



ETIC CERAMICS

DATA SHEET OF HONEYCOMB MONOLITH

Typical dimension

Face size (mm)	150X150	150X150	150X150	150X150	150X150	150X150	150X150
Standard length(mm)	300	300	300	300	300	300	300
Channel No.	25X25	34X34	35X35	40X40	43X43	50X50	59X59
Channel density(Cell/in ²)	18	34	35	46	53	72	100
Wall thickness(mm)	1.0	0.45	1.0	0.7	0.5	0.72/0.55	0.381
Surface Area (m ² /m ³)	540	805	695	825	1000	1008	1339
Free Area (%)	67	80	57	65	72	57/64	72.3

Typical physical data

Materials	Density(g/cm ³)	Average linear Expansion (20-800°C X10 ⁻⁶)	Specific heat (J/kg.k)	Thermal conductivity (20-1000°C W/m.k)	Max. operational temp(°C)
Alumina	>2.2	5.5-7.0	850-1050	1.4-2.0	≥1400
Mullite	2.1-2.25	6.0-6.5	850-1050	1.4-2.0	≥1500
Compact Cordierite	2.35-2.50	1.3-1.5	850-1200	1.5-2.5	≥1300
Porous Cordierite	1.85-1.95	2.3-5.0	750-800	1.3-1.5	≥1300
Stoneware	2.1-2.2	5.5-7.0	850-950	1.0-1.2	≥1200
Mullite Corundum	2.2-2.3	6.0-6.5	900-1100	1.4-2.0	≥1550
Mullite Cordierite	2.1-2.25	2.5-5.5	850-1050	1.4-2.0	≥1550

Chemical analysis

Materials	SiO	Al ₂ O ₃	MgO	Fe ₂ O ₃	Na ₂ O+K ₂ O+CaO	TiO ₂ +BaO
Alumina	40-45	48-55	--	≤1.0	4.0-5.5	--
Mullite	26-27	70-72	--	≤1.0	1.0-1.5	--
Compact Cordierite	47-49	36-38	6-8	≤1.0	2.5-3.5	0.7-0.8
Porous Cordierite	46-48	33-35	10-12	≤1.0	1.0-1.5	0.7-0.8
Stoneware	60-74	20-33	0.5-2.0	≤1.10	2.5-3.3	≤0.5
Mullite Corundum	21.5-22.5	71-72	2.0-2.1	≤0.5	0.25-0.30	0.10-0.15
Mullite Cordierite	28-36	55-65	2.5-3.2	≤0.8	≤1.0	--