

Ramcrete Drysic(Vibratory casting)

May, 2011

Product		DRYSIC-85-RE	DRYSIC-80-RE	DRYSIC-60-RE	DRYSIC-30-RE	DRYSIC-15-RE
Raw materials		Silicon carbide	Silicon carbide	Silicon carbide	Silicon carbide	Silicon carbide
Installation requirement (t/m ³)		2.65	2.68	2.72	2.78	2.81
Water additions (wt%)		5~6	5~6	5~6	5~6	5~6
Chemical composition (%)	SiC	83	78	60	30	15
	SiO ₂	6	8	9	8	10
	Al ₂ O ₃	9	12	28	58	70
	Fe ₂ O ₃	0.5	0.5	0.7	1.5	1.5
Bulk density	110°C × 24hrs.	2.65	2.68	2.72	2.78	2.81
	900°C × 3hrs.	2.64	2.67	2.71	2.77	2.80
	1200°C × 3hrs.	2.63	2.66	2.70	2.76	2.79
Cold crushing strength (MPa)	110°C × 24hrs.	63 (14)	121 (18)	93 (16)	93 (16)	93 (16)
	900°C × 3hrs.	83 (15)	127 (20)	112 (18)	112 (18)	112 (18)
	1200°C × 3hrs.	112 (17)	137 (25)	127 (20)	127 (20)	127 (20)
Bending strength (MPa)	110°C × 24hrs.	0	0	0	0	0
	900°C × 3hrs.	-0.1	-0.1	-0.1	-0.1	-0.1
	1200°C × 3hrs.	-0.1	-0.1	-0.1	-0.1	-0.1
Permanent linear change (%)	110°C × 24hrs.	0	0	0	0	0
	900°C × 3hrs.	-0.1	-0.1	-0.1	-0.1	-0.1
	1200°C × 3hrs.	-0.1	-0.1	-0.1	-0.1	-0.1
Porosity (%)	110°C × 24hrs.	7.5	6	8	8	8
	900°C × 3hrs.	13	11.5	13.5	13.5	13.5
	1200°C × 3hrs.	13.5	12	14	14	14
Thermal expansion (%) at 1000°C		0.25	0.2	0.35	0.55	0.65
Bending strength at elevated temp. (MPa) at 1260°C		11.7	19.6	15.6	15.6	15.6
Thermal conductivity (W/mK)	at 500°C	11.0	10.3	7.4	4.0	2.8
	at 1000°C	11.6	11.1	8.7	4.7	3.5
Oxidation weight increase (%) 1200°C × 48hrs.		0.6	0.5	0.4	0.3	0.1
Standard package quantity (kg)		25	25	25	25	25
Features		Spalling resistance Wet resistant	Abrasion resistant High strength	Abrasion resistant	Abrasion resistant	Abrasion resistant
Typical applications		Types of kilns Boiler	Types of kilns	Types of kilns Cement kiln Boiler	Types of kilns	Types of kilns

※The data shown here is a representative value, and no hallmark value.