

PRODUCT:	FIRECRETE SPECIAL
PRODUCT CLASS:	REFRACTORY MONOLITHIC
TYPE:	45% ALUMINA CASTABLE (HIGH STRENGTH)
NATURE OF BOND:	HYDRAULIC
INSTALLATION:	VIBRATION CASTING

GENERAL PROPERTIES

MAX. SERVICE TEMPERATURE:	1350 °C
MAXIMUM GRAIN SIZE:	5 mm
WATER REQUIRED FOR CASTING:	11.0 – 13.0 %

CHEMICAL ANALYSIS, %

	RANGE	TYPICAL VALUE	TEST PROCEDURE
Al ₂ O ₃	44.0 – 47.0	45.3	BIS 12107 Part 3
CaO	8.2 – 8.7	8.35	ASTM C 573
Fe ₂ O ₃	3.7 – 4.5	4.0	BIS 12107 Part 6

PHYSICAL PROPERTIES

	RANGE	TYPICAL VALUE	TEST PROCEDURE
Dry density, g / cc after drying at 110 °C / 24 hrs	2.05 – 2.20	2.11	BIS 10570
CCS, kg/cm ² after drying at 110 °C / 24 hrs	400 – 490	425	BIS 10570
after heating at 1100 °C / 3 hrs	200 - 300	270	BIS 10570
after heating at 1350 °C / 3 hrs	290 – 350	325	BIS 10570
% Retained on maximum size	0 – 5	1	BIS 1528 Part 14

THERMAL PROPERTIES

	RANGE	TYPICAL VALUE	TEST PROCEDURE
Refractoriness, Orton / °C		15-16 / 1430-1491	BIS 1528 Part 1
PLC, % after heating at 1100 °C / 3 hrs	(- 0.30) to (+0.30)	-0.15	BIS 10570
after heating at 1350 °C / 3 hrs	(- 0.30) to (+1.15)	+0.70	BIS 10570

Packaging: 25 kg bags

Delivery State: Dry

Storage Life: Best till 9 months from the date of production, if stored in proper condition.

Note:

(1) The data are current production averages. They can not be used as limits for specification.