



Insulating Castables

EIL Specifications / Sharadaa Equivalents

PARTICULARS	REFINSUL ZAP-014	REFINSUL ZAP-016	REFINSUL ZAP-015	REFINSUL ZAP-017	REFINSUL ZAP-018	REFINSUL ZAP-019	REFINSUL ZAP-020	REFINSUL ZAP-021
EIL EQUIVALENT	TYPE-I	TYPE-II	TYPE-III	TYPE-IV	TYPE-V	TYPE-VI	TYPE-VII	TYPE-AR
Bulk Density at 110°C (Max.) gm/cc	0.85	1.1	0.90	1.2	1.2	1.45	1.60	2.05
Thermal Conductivity								
at 500°C hot face (max.) Kcal/m-hr-°C	0.14	0.22	0.2	0.31	0.34	0.40	0.44	0.60
Cold Crushing Strength								
(Min.) Kg/cm ² dried at 110°C	12	20	25	40	50	85	130	210
Fired at 800°C	4	15	20	25	30	40	75	250 (400°C)
Fired at Service temp.	6 (1100°C)	12 (1100°C)	30 (1300°C)	40 (1300°C)	50 (1300°C)	50 (1300°C)	90 (1300°C)	320 (800°C)
Modulus of Rupture								
(Min.) Kg/cm ² dried at 110°C	4	12	8	11	13	18	24	
Fired at 800°C	3	6	7	7	10	14	18	60
Fired at Service temp.	3 (1100°C)	5 (1100°C)	8 (1300°C)	11 (1300°C)	12 (1300°C)	15 (1300°C)	20 (1300°C)	25
Permanent Linear Change (%) (Max)								
(Max.) % Fired at 800°C	± 1.0	± 0.8	± 0.3	± 0.2	± 0.2	± 0.2	± 0.2	- 0.1 (110°C)
Fired at Service temp.	± 1.6 (1100°C)	± 1.2 (1100°C)	± 1.0 (1300°C)	± 1.0 (1300°C)	± 1.0 (1300°C)	± 0.6 (1300°C)	± 1.0 (1300°C)	- 0.2 (500°C)
Chemical Analysis (%)								
Al ₂ O ₃ (Min)	32.0	32.0	40.0	35.0	35.0	42.0	43.0	15-20
Fe ₂ O ₃ (Max)	8.5	6.0	1.0	3.5	1.5	1.5	1.5	70-75 (SiO ₂)
Application Guidelines								
Mixer Placement	P R/V/T	P R/V/T	P R/V/T	P R/V/T	P R/V/T	P R/V/T	P R/V/T	P R/V/T
Water/Mix Temperature °C	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5	20 ± 5
Mixing Time (Min.): Dry/Wet	2/5	2/5	2/5	2/5	2/5	2/5	2/5	2/5

insulating castables product data sheet

Note : 1. Above are average typical test data subject to reasonable variations.
2. Tested as per **BIS 10570: 1983**.

3. Type of Mixer VAM with 33RPM
4. P: Preferred, R: Rodding, V-Vibration, T-Tamping