

**PREMIER REFRACTORIES OF INDIA PVT. LTD.**

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**Specification - Dense Castable**

BRAND NAME	PRILHEAT - A	PRILHEAT - A (HS)	PRILHEAT - A SUPER	PRILHEAT - K	PRILHEAT - K SPL	PRILHEAT - M	BRAND NAME	PRIL LC - 45	PRILCRETE (N)	PRILCRETE SPECIAL	PRILCRETE SUPER
Type Nature of Bond Application Method	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Type Nature of Bond Application Method	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting
<b>GENERAL PROPERTIES</b> Max grain size, mm Water required for casting, % Max Service Temp, °C RTE at 1000°C, %	5 7.50 - 9.50 1750 0.80	5 8.00 - 9.00 1700 0.80	5 8.00 - 9.00 1750 0.80	5 9.50 - 10.50 1600 0.60	5 9.50 - 10.50 1600 0.80	5 9.50 - 10.50 1700 0.75	<b>GENERAL PROPERTIES</b> Max grain size, mm Water required for casting, % Max Service Temp, °C RTE at 1000°C, %	6 4.50 - 5.50 1550 0.55	5 10.50 - 11.50 1400 0.55	5 10.50 - 11.50 1350 0.55	5 10.00 - 11.00 1450 0.65
<b>CHEMICAL ANALYSIS</b> Al <sub>2</sub> O <sub>3</sub> %, min Fe <sub>2</sub> O <sub>3</sub> %, max	90.00 0.80	88.00 0.80	90.00 0.80	60.00 1.00	60.00 1.00	80.00 1.50	<b>CHEMICAL ANALYSIS</b> Al <sub>2</sub> O <sub>3</sub> %, min Fe <sub>2</sub> O <sub>3</sub> %, max	45.00 1.00	45.00 4.00	45.00 4.00	70.00 5.00
<b>PHYSICAL PROPERTIES</b> Bulk Density, gm / cc after drying at 110°C / 24 hrs, min CCS, Kg / cm <sup>2</sup> , min after drying at 110°C / 24 hrs, min	2.75 600	2.75 650	2.85 850	2.20 350	2.10 450	2.60 550	<b>PHYSICAL PROPERTIES</b> Bulk Density, gm / cc after drying at 110°C / 24 hrs, min CCS, Kg / cm <sup>2</sup> , min after drying at 110°C / 24 hrs, min after heating at 1350°C / 3 hrs, min after heating at 1450°C / 3 hrs, min	2.30 725 1000	2.10 250 225	2.20 400 300	2.50 350 - 450
<b>THERMAL PROPERTIES</b> Refractoriness, OC / °C, min PLC, %, max after heating at 1550°C / 3 hrs	37 OC / 1820 ± 1.00	36 OC / 1804 ± 1.00	37 OC / 1820 ± 0.70	31 OC / 1683 ± 1.50	31 OC / 1683 ± 1.50	36 OC / 1804 ± 1.00	<b>THERMAL PROPERTIES</b> Refractoriness, OC / °C, min PLC, %, max after heating at 1350°C / 3 hrs after heating at 1400°C / 3 hrs	32 OC / 1717 ± 1.00	20 OC / 1564 ± 1.00	1450 ± 0.80	31 OC / 1683 - ± 1.00
BRAND NAME	PRILHEAT - C	PRILHEAT - C SPECIAL	PRILHEAT - C SUPER	BRAND NAME	PRIL LC - 45	PRIL TABCAST 94	BRAND NAME	PRIL LC - 45	PRILCRETE (LT)	PRILCRETE (LTC)	
Type Nature of Bond Application Method	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Type Nature of Bond Application Method	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Type Nature of Bond Application Method	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	Dense Castable Hydraulic Vibro Casting	
<b>GENERAL PROPERTIES</b> Max grain size, mm Water required for casting, % Max Service Temp, °C RTE at 1000°C, %	5 9.50 - 10.50 1500 0.55	5 9.50 - 10.50 1500 0.55	5 9.50 - 11.00 1500 0.55	<b>GENERAL PROPERTIES</b> Max grain size, mm Water required for casting, % Max Service Temp, °C RTE at 1000°C, %	6 4.50 - 5.50 1550 0.55	5 8.00 - 9.50 1800 0.90	<b>GENERAL PROPERTIES</b> Max grain size, mm Water required for casting, % Max Service Temp, °C RTE at 1000°C, %	6 4.50 - 5.50 1550 0.55	5 11.00 - 12.00 800 0.55	5 11.00 - 13.00 500 0.55	
<b>CHEMICAL ANALYSIS</b> Al <sub>2</sub> O <sub>3</sub> %, min Fe <sub>2</sub> O <sub>3</sub> %, max	50.00 1.30	50.00 1.30	50.00 1.70	<b>CHEMICAL ANALYSIS</b> Al <sub>2</sub> O <sub>3</sub> %, min SiO <sub>2</sub> %, max Fe <sub>2</sub> O <sub>3</sub> %, max CaO, %, max	45.00 1.00	94.00 0.30 0.30 5.00	<b>CHEMICAL ANALYSIS</b> Al <sub>2</sub> O <sub>3</sub> %, min Fe <sub>2</sub> O <sub>3</sub> %, max	45.00 1.00	30.00 4.00	25.00 2.50	
<b>PHYSICAL PROPERTIES</b> Bulk Density, gm / cc after drying at 110°C / 24 hrs, min CCS, Kg / cm <sup>2</sup> , min after drying at 110°C / 24 hrs, min after heating at 800°C / 3 hrs, min after heating at 1100°C / 3 hrs, min after heating at 1500°C / 3 hrs, min	2.10 350 - - -	2.10 400 - -	2.25 550 400 350 500	<b>PHYSICAL PROPERTIES</b> Bulk Density, gm / cc after drying at 110°C / 24 hrs, min CCS, Kg / cm <sup>2</sup> , min after drying at 110°C / 24 hrs, min after heating at 800°C / 3 hrs, min after heating at 1100°C / 3 hrs, min after heating at 1500°C / 3 hrs, min	2.30 725 825 900 1000	2.80 600 450 400 700	<b>PHYSICAL PROPERTIES</b> Bulk Density, gm / cc after drying at 110°C / 24 hrs, min CCS, Kg / cm <sup>2</sup> , min after drying at 110°C / 24 hrs, min after heating at 800°C / 3 hrs, min after heating at 1350°C / 3 hrs, min	2.30 725 1000	1.90 250 220	2.20 400 400 -	
<b>THERMAL PROPERTIES</b> Refractoriness, OC / °C, min PLC, %, max after heating at 1500°C / 3 hrs	30 OC / 1665 ± 1.00	30 OC / 1665 ± 1.00	30 OC / 1665 ± 0.85	<b>THERMAL PROPERTIES</b> Refractoriness, OC / °C, min PLC, %, max after heating at 800°C / 3 hrs after heating at 1100°C / 3 hrs after heating at 1500°C / 3 hrs	32 OC / 1717 ± 0.20 ± 0.30 ± 1.00	38 OC / 1835 ± 0.20 ± 0.20 ± 0.50	<b>THERMAL PROPERTIES</b> Refractoriness, OC / °C, min PLC, %, max after heating at 500°C / 3 hrs after heating at 800°C / 3 hrs after heating at 1100°C / 3 hrs after heating at 1350°C / 3 hrs	32 OC / 1717 ± 0.20 ± 0.30 ± 1.00	- - ± 1.00	- ± 0.50 -	