



(Formerly Tata Refractories Limited)
Product Definition Sheet

TRL CRAL 10P
(F341030)

Revision No. : 12

Date: 05-10-2019

Product Name TRL CRAL 10P

Product Description Fired Alumina – Chrome – Zirconia Brick

CONTROL PROPERTIES

Chemical Analysis (Calcined Basis)	Unit By wt	Value		Test Method
		Typical	Limit	
Al ₂ O ₃	%	85.5	≥ 82.0	By XRF
Cr ₂ O ₃	%	9.5	≥ 9.0	
Physical Properties	Unit			
Bulk Density	Kg/m ³	3400 3250	≥ 3300 for standard shape ≥ 3200 for T&G shape	ISO 5017 : 1998
Apparent porosity	Vol. %	16.7 18.3	≤ 17.0 for standard shape ≤ 19.0 for T&G shape	ISO 5017 : 1998
CCS	N/mm ²	95.0 75.0	≥ 80 for standard shape ≥ 70 for T&G shape	ISO 10059-2 : 2003

SUPPLEMENTARY PROPERTIES

PLC, 1550°C/2hrs, Min/Max	%	+0.02	± 0.1	ISO 2478 : 1987 (Volumetric Method)
RUL (t _a)	°C	1740	≥ 1700	IS 1528 (Part 2) : 2003
RTE at 1100°C	%	0.68	≤ 0.8	IS 1528 (Part 19) : 1991
Thermal Shock Resistance (950 °C with water)	Cycle	+ 45	≥ 40	DIN 51068 (Part 1)

INFORMATIVE PROPERTIES

ZrO ₂	%	1.2	-	By XRF
SiO ₂	%	2.10	-	
Thermal Conductivity	W/mK	3.00 (at 400°C) 2.90 (at 800°C) 2.80 (at 1000°C)	-	Cu calorimetric method with single brick

Control Dimension AQL 6.5% for critical dimensions (ISO 5022 Table – 3)

Sampling/Acceptance ISO 5022, Table 4 or Table 10(AQL4%)

Shelf Life 36 months from the date of manufacture when stored under shed & free from moisture. Signature:

Prepared and Issued by Technology Manager

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- Note: 1) The typical technical data shown are based on average results on production samples and are subjected to normal variation on individual tests. Hence, it cannot be taken as specification.**
- 2) The above specification is valid for solid pressed standard items only.**