

Zircon & Zirconia-Mullite Refractories



CUMIZON & CUMIZITE

USER INDUSTRIES	APPLICATION
• Glass	CUMIZON for Melter Bottom Blocks, Filler Blocks below silica crown skew Blocks CUMIZITE for Forehearth sub structure Borosilicate furnaces: Forehearth superstructure Spout burner blocks Regenerator Top checkers Regenerator Crown



PROPERTIES	UNIT	CUMIZON		CUMIZON 65G	
		Limit Value	Typical Value	Limit Value	Typical Value
Maximum Hot Face Temperature	°C	1600	1600	1600	1600
Bulk Density	gm/cc	3.50 min.	3.55	3.60 min.	3.70
Apparent Porosity	%	22.0 max.	20.5	19.0 max.	14.0
Cold Crushing Strength	Kg/cm ²	450 min.	600	750 min.	900
Reheat Change After heating at 1450°C for 6 hrs.	%	+/- 0.2 max.	+ 0.1	+/- 0.2 max.	+ 0.1
Chemical Analysis					
ZrO ₂	%	62.0 min.	65.2	63.0 min.	65.5
SiO ₂		33.3 max.	32.6	33.0 max.	32.1
Fe ₂ O ₃		0.50 max.	0.40	-	0.40
Recommended Laying Mortars		CUMBOND LZ 85		CUMBOND LZ 85	

Note : The above typical values shown are based on average test result on standard samples. Properties are subjected to reasonable variation based on product shape etc. and hence should be considered for general guidance only.

CUMIZON & CUMIZITE Zirconia mullite refractories are specially meant for applications that encounter alkaline vapour attack. They have good load bearing capacity, high refractoriness and high hot strength.

CUMIZON : Zircon based product
CUMIZON 65G : Zircon based product, Higher Strength

Feasibility of special shapes require case-by-case study by CUMI manufacturing and Technical team. We would request all our customers to kindly ask CUMI Sales Representatives for detail Product Data, Quality Assurance Plans etc. as and when applicable.



CARBORUNDUM UNIVERSAL LIMITED
SUPER REFRACTORIES



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PROPERTIES	UNIT	CUMIZITE ZM		CUMIZITE ZM2 HF SPL	
		Limit Value	Typical Value	Limit Value	Typical Value
Maximum Hot Face Temperature	°C	1750	1750	1750	1750
Bulk Density	gm/cc	3.15 min.	3.20	2.90 min.	3.00
Apparent Porosity	%	19.0 max.	17.0	20.0 max.	17.0
Cold Crushing Strength	Kg/cm ²	750 min.	800	800 min.	950
Reheat Change After heating at 1450°C for 6 hrs.	%	+/-1.0 max.	+0.2	+/-1.0 max.	+ 0.05
Thermal Conductivity At 1000°C Hot Face Temperature	W/m ² K	2.0 max.	1.88	2.0 max.	1.90
Chemical Analysis					
Al ₂ O ₃	%	70	70.3	65.0 min.	65.5
ZrO ₂		19.0 min.	19.3	19.0 min.	19.8
SiO ₂		11.0 max.	10.1	13.0 max.	12.9
Fe ₂ O ₃		0.10 max.	0.09	0.15 max.	0.13
Recommended Laying Mortars		CUMIBOND LZM 30		CUMIBOND LZM 30	

Note : The above typical values shown are based on average test result on standard samples. Properties are subjected to reasonable variation based on product shape etc. and hence should be considered for general guidance only.

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CUMIZITE ZM : Fused Alumina and Zircon with secondary mullite bond

CUMIZITE ZM2 HF SPL : Fused Zirconia – Mullite with secondary mullite bond

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