

Grindwell Norton Limited - PCR, India

Document Name	Product specifications – Cryston TS	Rev. No.	01
		Rev. Date	21.04.2020
Document No.	HPRG/LAB/MS/78	Page No.	1 of 1

I. Product Description: Cryston TS

Cryston TS is silicon nitride bonded silicon carbide from Saint-Gobain Ceramic Materials. Its good load bearing strength, good oxidation resistance means longer life while its strength and low mass creates more efficient kiln furniture design that increase overall kiln efficiency

It can be used to manufacture a variety of setters and Plates of very low thickness ranging from 7 mm to 10 mm

II. Typical Physical Properties (measured on test samples):

Sl. No.	Properties	Unit	Spec.	Typical Values
1	Bulk Density	g/cc	>2.75	2.77
2	Apparent Porosity	%	<13	10
3	Cold Modulus of Rupture (At room temperature)	MPa	>120	135
4	Hot Modulus of Rupture (At 1400°C)	MPa	>130	140
5	Modulus of Elasticity	GPa		220
6	Thermal Conductivity (at 1000°C)	W/m.K		18
7	Co-efficient of thermal Expansion	/°C		4.4X10 ⁻⁶
8	Maximum Service Temperature	°C		1450

III. Chemical Properties (typical):

Sl. No.	Components	Unit	Typical Values
1	SiC	%	73
2	Si ₃ N ₄	%	22
3	Oxides	%	5

IV. Storage: Store in a cool and dry place and handle with care as these are brittle in nature

V. Shelf Life: Not applicable.

Note: The physical & chemical properties and specification of the product represents typical average results obtained in accordance with generally accepted Indian Standards test methods conducted under controlled lab conditions, and are subject to normal manufacturing variations.