



MATERIAL TECHNICAL DATA SHEET

TRADE NAME: BX-5

I. Material Description

Chemical Name & Formula: White alumina - Al_2O_3

II. Components

Al_2O_3	MIN %	95
Other	MAX %	5

III. Physical Data

Physical form	Polycrystalline Structure
Boiling Temperature	NA
Melt Temperature	2050 °C
Vapor Pressure	NA
Evaporation Rate	NA
Specific Gravity	NA
Density	3,70 g/cm ³
Water Solubility	Insoluble
Color	White
Odor	None

IV. Mechanical Properties at Room Temperature

Water Absorption	%	: 0
Vickers Hardness (HV 0.5)	Gpa	: 15
Flexural Strength	Mpa	: 320
Young's Modulus	Gpa	: 310
Fracture Toughness	MPa*m ^{1/2}	: 4
Maximum Service Temperature	°C	: 1300

V. Physical and Chemical Properties

Excellent chemical and wear resistance.
Low resistance to HF (Hydrofluoric acid).

VI. Fire and Explosion Data

Flashpoint	: NA
Auto - Ignition Temperature	: NA
Flammability Limits in Air	: NA

Product is non - flammable
Not an explosion hazard

Please, note that all the above-mentioned values are based on test pieces and may vary according to component design.

These values are not guaranteed in any way and should only be treated as indicative values.

They should be used for guidance only and for no other purpose.