NorZon NV

Bonded Applications

Grain Code: 1618

Chemical Properties (Typical)

CHEMICAL	PERCENT (%)
Aluminium Oxide (Al_2O_3)	53.0-60.0
Zirconium Oxide ($ZrO_2 + HfO_2$)	39.0-42.5
Calcium Oxide (CaO)	Max 0.13
Iron Oxide (Fe_2O_3)	Max 0.20
Magnesium Oxide (MgO)	Max 0.05
Silica (SiO_2)	Max 0.60
Sodium Oxide (Na_2O)	Max 0.05
Titanium Oxide (TiO_2)	Max 2.00
Yttria (Y_2O_3)	Max 0.80

Physical Characteristics

DESCRIPTION	MEASUREMENT
Crystal size	10-15 microns
True density	4.68 gms/cc
Vickers hardness for 50g load	19 GPA
Melting point	1890°C
LPD range	1.90-2.30 gms/cc

Loose Packed Density Range

ANSI B 74.4 1992 Test Unit A

SIZE	1618 LPD
20	2.344-2.440
24	2.344-2.440
30	2.344-2.440
36	2.330-2.440
46	2.290-2.440

U.S. Standard Sieves/Limits–Modified ANSI

SIZE	OVERSIZE	COARSE GRIT	1ST NOMINAL	2ND NOMINAL	PAN
20	+12/0	+16/(0-20)	+18/(20-50)	(+18+20)/60+	-25/(0-10)
24	+16/0	+20/(15-40)	+25/(35-65)	(+25+30)/55+	-35/(0-3)
30	+18/0	+25/(10-35)	+30/(40+)	(+30+35)/55+	-40/(0-3)
36	+20/0	+30/(0-25)	+35/45+	(+35+40)/65+	-45/(0-3)
46	+30/0	+40/(0-30)	+45/40+	(+45+50)/65+	-60/(0-3)