

# ATLAS BALL & BEARING CO. LIMITED

## ZIRCONIA ZrO<sub>2</sub> CERAMIC BALL DATA SHEET

### Attributes

Zirconia ceramic balls resist corrosion and abrasion extremely well. Not recommended for hydrochloric acid and strong alkaline solutions. They also have low thermal conductivity and a high resistance to heat.

### Chemical Analysis

94.8% ZrO<sub>2</sub>,  
5.2% Y<sub>2</sub>O<sub>3</sub>

### Typical Uses/Applications

Check valves  
Flow meters

### Grades Available

G10, G25

### Mechanical/Physical Properties

Hardness:	HRA 87, 1160 Hv
Specific Gravity (density)	6.0 g/cm <sup>3</sup> (0.217 lb/in <sup>3</sup> )
Magnetic properties:	Non magnetic
Modulus of Elasticity	200-250 GPa
Bending strength	1200 Mpa
Fracture toughness	10 Mpa.m <sup>1/2</sup>
Max working Temp	800 <sup>0</sup> C

[www.atlasball.co.uk](http://www.atlasball.co.uk)

Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet

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