

# ATLAS BALL & BEARING CO LIMITED

## NIMONIC®75 BALL DATA SHEET

### Attributes

Nimonic 75 is a 80/20 nickel-chromium alloy with controlled additions of titanium and carbon. Nimonic 75 has good mechanical properties and oxidation resistance at high temperatures.

### Specification with equivalents

Nimonic 75  
UNS N06075  
W.Nr 2.4951  
W.Nr 2.4630

### Chemical Analysis %

Ni	Balance	Al	0.40 max
Cr	18.0 – 21.0	Si	1.00 max
Co	5.00 max	C	0.08 – 0.15
Fe	5.00 max	S	0.02 max
Mn	1.00 max	P	0.015 max
Cu	0.50 max	Pb	0.005 max
Ti	0.20 – 0.60		

### Typical uses/applications

Gas turbine engineering, industrial thermal processing, Aerospace fasteners, furnace components and heat-treatment equipment.

### Mechanical/physical properties

Hardness	350-440 Hv
Tensile strength	1200-1500 Mpa
Approx service temperature	-200 to +1000° C
Specific gravity (density)	8.37 g/cm <sup>3</sup> (0.302 lb/in <sup>3</sup> )
Melting point	1380° C
Coefficient of Expansion	11.0 µm/m °C (20-100° C)
Modulus of rigidity	75.6 kN/mm <sup>2</sup>
Modulus of elasticity	206 kN/mm <sup>2</sup>

### Corrosion Data

Available on application

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

Nimonic is a trade name of Special Metals Group of Companies  
Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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