

# ATLAS BALL & BEARING CO LIMITED

## NYLON (POLYAMIDE) BALL DATA SHEET

### Attributes

Nylon is very widely used plastic especially as a bearing wear material. The light weight of nylon makes a convenient replacement for bronze, brass or other metals. Its weakness is its water absorption.

### Specification with equivalent trade names

Polyamide  
Nylon  
Nylon 66  
Zytel®

### Typical uses/applications

Bearings

### Mechanical/physical properties

Hardness	R70-R121 Rockwell M
Tensile strength	55-86 Mpa
Elongation, break	28-90%
Elongation, yield	4-6%
Tensile Modulus	2000-3000 MPa
Maximum service temperature	99° C
Melting temperature	218-263° C
Specific gravity (density)	1.04-1.18 g/cm <sup>3</sup> (0.038-0.043 lb/in <sup>3</sup> )
Water absorption - 24 hours	6.4-8.5%

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

Zytel is a trade name of DuPont Company  
Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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