# Main plastics used in balls manufacturing characterics



Material	Density	Hardness	Using temperature	Properties
Polyamide 6.6 PA 6.6 Nylon	1,14 g/cm <sup>3</sup>	100 shore D	Between -30 and +100°C  Temporarily + 150°C	<ul> <li>High tensile strength</li> <li>High rigidity and hardness</li> <li>High resistance to wear, good sliding characteristics</li> <li>Shape stability at high temperatures</li> <li>High resistance to solvents, weak alcalis, benzole, oils, grease, benzine and weak acids</li> <li>Main use: screw, gears</li> </ul>
Polyacetal POM Delrin	1,40 g/cm <sup>3</sup>	80 shore D	Between -60 and +100°C Temporarily +120°C	<ul> <li>High stength, hardness and rigidity</li> <li>High resistance to abrasion and weak coefficient of friction</li> <li>Good electrical and dielectrical properties</li> <li>Low water absorption</li> <li>High resistance to wear</li> <li>High resistance to chemical products but sensitive to mineral acids and chlorine</li> <li>Main use: pump, sluice gate, bearing</li> </ul>

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## Tous nos produits

Billes de précision Billes creuses Billes de broyage – polissage – grenaillage Satellites & bicônes Aiguilles & rouleaux

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Material	Density	Hardness	Using temperature	Properties
Polypropylène PP Hostalen	0,90 g/cm <sup>3</sup>	100 shore D	Between - 30 et +90 °C  Temporarily + 130 °C	<ul> <li>Very low weight and density (float on water)</li> <li>Hard with high resistance to heat</li> <li>Can be damaged with intensive sun exposure</li> <li>High resistance to chemical products, and to main of solvents and glue</li> <li>Can be recyclable</li> <li>Main use: packaging, recycling, automobile spare parts</li> <li>Light loaded bearings, and many other light loaded applications</li> </ul>
PTFE Teflon	2,15 g/cm <sup>3</sup>	55 shore D	Between -200 et +250°C Temporarily + 300°C	<ul> <li>Polytetrafluorethylen is a thick material and with weak friction coefficient</li> <li>Very good dielectric properties</li> <li>Fusion temperatures less high compared to main other plastics</li> <li>High resistance to heat</li> <li>High resistance to chemical products</li> <li>Quite soft consequently less good mechanical properties than other industrial plastics</li> <li>Main use: bearings, sluice gate, gears</li> </ul>

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Material	Density	Hardness	Using temperature	Properties
Polyuréthane PUR	1,20 g/cm <sup>3</sup>	90 shore A	Between -200 et +80°C  Temporarily +100°C	<ul> <li>High resistance to cracking and tearing</li> <li>High water absorption</li> <li>Rigidity is between that of rubber and thermoplastics</li> <li>High resistance to oils, solvents, mineral greases and weak acids</li> <li>Main use: smooth bearing, wear plate, sluice gate</li> </ul>

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