

Elektron[®] 43

Smiths High Performance



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Page: 1 of 1

Magnesium casting alloy

Elektron[®] 43 offers attractive mechanical properties at both ambient and elevated temperatures.

Elektron[®] 43 magnesium alloy can be used successfully in temperatures up to 300°C.

While offering excellent energy absorption characteristics, the material provides good corrosion resistance. It is a perfect choice for motorsport applications where weight reduction is required while maintaining the highest performance levels. The alloy is weldable using the tungsten arc inert gas process.

Chemical Composition (weight %)

	Mg	Y	Zr	Rare Earths
Min.	Bal	3.70	0.20	2.30
Max.	Bal	4.30		3.50

Characteristics:

- High-strength magnesium casting alloy
- Good corrosion resistance
- For use in temperatures up to 300°C

Applications:

- Chassis components
- Structural engine components
- Weight reduction design

About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials. We are material supply chain partners supporting high-technology market sectors.



Physical Properties:

	Metric	Imperial
Density	1.8 g/cm	0.06516/in
Melting Point	540 - 640°C	1004 - 1184°F

Mechanical Properties:

	Metric	Imperial
Tensile strength	220 MPa	36259 psi
Poisson's ratio	0.27	0.27
Elongation	2%	2%
Hardness, Vickers	85-105	85-105


www.smithshp.com
info@smithshp.com


Unit 3, Juno Place
Stratton Business Park
Biggleswade SG18 8XP

Tel: +44 (0)1767 604 708



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