



Zamak 4

Alternative Designations

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Key Features

Ductile • Flexibility • Excellent corrosion resistant • Durable

Description

It has a high strength-to-weight ratio and good ductility, making it an ideal material for many die casting applications. It also has excellent corrosion resistance and can be plated with a variety of finishes. Zamak 4 brings an improvement to the mould sticking problems faced with Zamak 3. It maintains the ductility of Zamak 3 but reduces the effect of die-casting. It is used in the production of clothing accessories such as zipper sliders and zipper pulls.

Mechanical Properties

Yield strength	221 – 269 MPa
Tensile strength	316 MPa
Elongation at break	7%
Hardness	86
Module of elasticity	96 GPa

Physical Properties

Density	6.6 g/cm ³
Electrical conductivity	1.57E+07 m/Ω · mm ²
Coefficient of thermal expansion	27.4 K ⁻¹ · 10 ⁻⁶
Thermal conductivity	108 – 113 W/m · K
Specific heat capacity	418.7 J/kg · K

Chemical Composition

Al	3.9 – 4.3%	N	-
Bi	-	Nb	-
C	-	Ni	0.001%
Cd	0.002%	O	-
Co	-	P	-
Cr	-	Pb	0.003%
Cu	0.3 – 0.5%	S	-
Fe	0.02%	Si	0.02%
H	-	Sn	0.002%
Mg	0.03 – 0.06%	Ti	-
Mn	-	V	-
Mo	-	Zn	Rest is Zn

Reference

Datasheets provided by Xometry contain materials sourced through trusted OEMs, material distributors, and databases. Please visit Materialdatacenter.com for further information on this material.