

## SPECIFICATIONS

European Standards:

EN - 4276 - 4277 - 4278 - 4289 - 4294

UNS : A97175

## TYPICAL MECHANICAL PROPERTIES

- T7352 and T7354 conditions.

-Tensile test at ambient temperature, longitudinal direction

- UTS:	>455 N/mm <sup>2</sup>
- 0.2 % Yield strength:	>370 N/mm <sup>2</sup>
- Elongation (5d):	>7 %

## COMPOSITION

Zinc.....	5.60
Magnesium.....	2.50
Copper.....	1.60
Chromium.....	0.23
Aluminum.....	Base

## APPLICATIONS

- Forged bars and medium sized open or closed-die forgings, used in the production of structural components for aerospace where high mechanical strength is required.

## CHARACTERISTICS

- This alloy achieves a good balance between mechanical properties (strength, toughness and fatigue) and stress corrosion resistance for thicknesses 100mm.
- As its hardenability is not very high, grades 7010 or 7050 would be preferred where greater thicknesses are involved.

## HEAT TREATMENT

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- Solution treatment, quench and aging are adjusted depending on the thickness of parts and the balance of properties to be achieved.
- The T735X over-aged condition is the most common for this alloy.

## PHYSICAL PROPERTIES

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- Density: 2.8
- Modulus of elasticity in N/mm<sup>2</sup>:
  - at 20°C: 71.5 x 10<sup>3</sup>
- Mean coefficient of expansion in m/m.°C:
  - between 20°C and 100°C: 23.4 x 10<sup>-6</sup>
  - between 20°C and 200°C: 24.3 x 10<sup>-6</sup>
  - between 20°C and 300°C: 25.2 x 10<sup>-6</sup>
- Thermal conductivity in W.m/m<sup>2</sup>.°C:
  - at 20°C: 155 (T76 condition)
- Mean specific heat in J/g°C:
  - between 0°C and 100°C: 0.864
- Electrical resistivity in μΩ.cm<sup>2</sup>/cm
  - at 20°C: 4.31 (T76 condition)
- Electrical conductivity in S/m:
  - at 20°C: 23.2 x 10<sup>6</sup>

Contact:

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The data provided in this document represent typical or average values rather than maximum or minimum guaranteed values. The applications indicated for the grades described are given as guidance only in order to help the reader in his personal assessment. Please note that these do not constitute a guarantee whether implicit or explicit as to whether the grade selected is suited to specific requirements. Aubert & Duval's liability shall not under any circumstances extend to product selection or to the consequences of that selection.