



1 ALUMINIUM ALLOY 6012 / GENERALITA' LEGA 6012

This Datasheet explains the chemical composition and mechanical properties of wrought products made from aluminium alloy.

La presente scheda definisce la composizione chimica della lega e le caratteristiche meccaniche dei semilavorati in lega di alluminio ottenuti da lavorazione plastica.

2 DESIGNATION / DESIGNAZIONE

- Conventional designation: **Al MgSiPb**
Designazione convenzionale
- Numerical designation: **6012**
Designazione numerica

3 CHEMICAL COMPOSITION / COMPOSIZIONE CHIMICA – EN 573-3

| Chemical composition % | Si | Fe | Cu | Mn | Mg | Cr | Ni | Zn | Ti | Remarks | Others | |
|------------------------|-----|------|------|------|-----|------|----|------|------|-------------|-------------|-------------|
| | | | | | | | | | | | Each | Total |
| 6012 | 0.6 | 0.50 | 0.10 | 0.40 | 0.6 | 0.30 | - | 0.30 | 0.20 | 0.7 Bi | 0.05 max | 0.15 max |
| | 1.4 | max | max | 1.0 | 1.2 | max | | max | max | 0.40–2.0 Pb | | |

4 MECHANICAL PROPERTIES (indicative min values) / C. MECCANICHE

| Product | Tempers | Dimensions [mm] | | Direction Specimen | Rm [N/mm ²] | | Rp0.2 [N/mm ²] | | A _{50mm} % min. | Hardness Typical value HBW |
|--------------------------------------|---------------------|------------------|---|--------------------|-------------------------|-----|----------------------------|-----|--------------------------|----------------------------|
| | | D | S | | min | max | min | max | | |
| Extruded/Estruso EN 755-2 | T6, T6510, T6511 | D, S ≤ 150 | | L | 310 | - | 260 | - | 6 | 105 |
| | | 150 < D, S ≤ 200 | | L | 260 | - | 200 | - | - | |
| Drawn/Trafilato EN 754-2 | T4 | D, S ≤ 80 | | L | 200 | - | 100 | - | 8 | - |
| | T6 | D, S ≤ 80 | | L | 310 | - | 260 | - | 6 | 105 |

For a complete evaluation, please refer to EN 755-2 (Extruded Product) and EN 754-2 (Drawn Product).

5 PHYSICAL PROPERTIES (indicative values) / CARATTERISTICHE FISICHE

| Density | Conducibility % IACS (T62) |
|------------------------|-------------------------------|
| 2.71 g/cm ³ | 43-46 |