

## ZINC natural products certificate

ZINC natural is a rolled zinc, alloyed with copper and titanium, conforming to the European standard EN 988, made from zinc of grade Z1 according to the European standard EN 1179, that is 99.995 % minimum zinc content. Its main characteristics are the following:

### Chemical composition (EN 988):

- Copper: 0.08 % minimum and 1.0 % maximum
- Titanium: 0.06 % minimum and 0.2 % maximum
- Aluminium: 0.015 % maximum
- Zinc of grade Z1 (\*): remainder

(\*) Zinc of grade Z1 shall comply with the following chemical composition (EN 1179):

- Nominal zinc content: 99.995 %
- Lead: 0.003 % maximum
- Cadmium: 0.003 % maximum
- Iron: 0.002 % maximum
- Tin: 0.001 % maximum
- Copper: 0.001 % maximum
- Aluminium: 0.001 % maximum
- Total of the latest 6 elements: 0.005 % maximum

### Mechanical properties (EN 988):

- Tensile strength Rm (SL): 150 N/mm<sup>2</sup> minimum
- Percentage total elongation at fracture A50mm (SL): 35 % minimum
- 0.2 % proof strength, non-proportional extension Rp0,2 (SL): 100 N/mm<sup>2</sup> minimum
- Percentage elongation after fracture in creep test: 0.1% maximum
- Bend test: no cracks on fold (parallel fold to the rolling direction)

### Physical properties (for guidance only) (EN 988):

- Density: 7.2 kg/dm<sup>3</sup>
- Thermal expansion (parallel to the rolling direction):  $22 \times 10^{-6}$  m/(m.K)
- Melting point: 420 °C
- Recrystallization temperature: 300 °C
- Thermal conductivity: 110 W/(m.K)
- Electrical conductivity: 17 MS/m

(SL): parallel to the rolling direction

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VM BUILDING SOLUTIONS



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