



30 Zn Zinc 65.409	28 18 2	13 Al Aluminium 26.981	28 3	29 Cu Copper 63.546	28 18 1
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ZINC ALLOY ZnAl8Cu1

Producer: NFM-CRAMET N.V. • B-9770 Kruishoutem

Producer's mark:

Colour code: ■ white/blue

1) ZINC ALLOY according to EN1774: 1997 – Standard for foundry purposes, ingot and liquid

- Alloy symbol: ZnAl8Cu1
- Alloy number: ZL0810
- Short designation: ZL8

Chemical composition of alloy ingot and liquid (in % mass fraction):

Al Aluminium	Cu Copper	Mg Magnesium	Fe Iron	Pb Lead	Cd Cadmium	Sn Tin	Ni Nickel	Si Silicon	Zn Zinc
8.2 8.8	0.9 1.3	0.02 0.03	0.035 max.	0.005 max.	0.005 max.	0.002 max.	0.001 max.	0.035 max.	balance

2) ZINC ALLOY according to EN12844: 1998 – Standard for castings

- Alloy number: ZP0810
- Short designation: ZP8

Chemical composition of castings (in % mass fraction):

Al Aluminium	Cu Copper	Mg Magnesium	Fe Iron	Pb Lead	Cd Cadmium	Sn Tin	Ni Nickel	Si Silicon	Zn Zinc
8.0 8.8	0.8 1.3	0.015 0.03	0.06 max.	0.006 max.	0.006 max.	0.003 max.	0.02 max.	0.045 max.	balance

3) PHYSICAL AND MECHANICAL PROPERTIES AT 20 °C:

guidance mid-range data for pressure die castings

- Tensile strength: 370 MPa
- Elongation A (50 mm): 8%
- Brinell Hardness HBS 500-10-30: 100
- Impact energy (unnotched 6.3 x 6.3 mm bar): 40 J
- Youngs modulus: 86 GPa
- 0.2% Yield strength: 220 MPa
- Fatigue strenght (10⁸ cycles): 100 MPa
- Creep stress for 0,5% elongation (3000 h): 160 MPa
- Density: 6.3 kg/dm³
- Melting range: 375 to 404 °C
- Coefficient of thermal expansion: 23 μm/(m·K)
- Thermal conductivity (18 °C): 115 W/(m·K)
- Electrical conductivity (10 °C): 28% IACS

Remarks: 1 MPa equivalent to 1 N/mm²
 1 GPa equivalent to 1kN/mm²
 100% IACS equivalent to 58S·m/mm²