



30	28	13	28
Zn	12	Al	3
Zinc		Aluminium	
65.409		26.981	

ZINC ALLOY ZnAl4

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

Producer's mark:

Colour code: white/yellow

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

- Alloy symbol: ZnAl4
- Alloy number: ZL0400
- Short designation: ZL3

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
3.8 4.2	0.03 max.	0.035 0,06	0.020 max.	0.003 max.	0.003 max.	0.001 max.	0.001 max.	0.02 max.	balance

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

- Alloy number: ZP0400
- Short designation: ZP3

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
3.7 4.3	0.1 max.	0.025 0.06	0.05 max.	0.005 max.	0.005 max.	0.002 max.	0.02 max.	0.03 max.	balance

3) PHYSICAL AND MECHANICAL PROPERTIES AT 20 °C:

guidance mid-range data for pressure die castings

- Tensile strength: 280 MPa
- Elongation A (50 mm): 10%
- Brinell Hardness HBS 500-10-30: 83
- Impact energy (unnotched 6.3x6.3 mm bar): 57 J
- Youngs modulus: 85 GPa
- 0.2% Yield strenght: 200 MPa
- Fatigue strength (10⁸ cycles): 48 MPa
- Creep stress for 0.5% elongation (3000h): 80 MPa
- Density: 6.7 kg/dm³
- Melting range: 382 to 387 °C
- Coefficient of thermal expansion: 27 µm/(m·K)
- Thermal conductivity (18 °C): 113 W/(m·K)
- Electrical conductivity (10 °C): 26% IACS

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