

MATERIAL NO.:

3.4365

DESIGNATION:

DIN: AlZnMgCu 1.5
EN: AW-7075
AFNOR: A - Z5GU
UNI: 9007 / 2
AISI: -

INDICATORY ANALYSIS:

Si 0.40
 Fe 0.50
 Cu 1.20-2.00
 Mn 0.30
 Mg 2.10-2.90
 Cr 0.18-0.28
 Zn 5.10-6.10
 Ti 0.20

DELIVERY CONDITION:

T651 - Solution annealed, stress relieved by controlled stretching and artificially aged.

STRENGTH:

depending on the thickness of the plate

plate thickness [mm]	10	20	50	60	80	90	100	120	150	200
tensile strength Rm [N/mm ²]	540	540	530	525	495	490	460	410	360	360
yield point Rp 0,2 [N/mm ²]	470	470	460	440	420	390	360	300	260	240

THERMAL CONDUCTIVITY AT 100°C:

130-160 $\frac{W}{m K}$

COEFFICIENT OF THERMAL EXPANSION [10⁻⁶/K]

100°C	200°C	300°C	400°C	500°C	600°C	700°C
23.4	24.3	25.2				

CHARACTER:

» Hardened, high-strength **aluminium zinc alloy** with good properties for grain etching, as well as good machinability, EDM and polishing properties
 Density: 2.8 kg/dm³
 Coefficient of thermal expansion: 23.4 10⁻⁶m/mK
 max. temperature permanent/short term: 90/120°C

APPLICATION:

» Plates for mould bases and dies sets with increased requirements for strength; components for machine and jig construction

TREATMENT BY:

» Polishing, machining, EDM: possible
 » Etching: suitable for grain etching
 » Repair welding: not suitable for welding

HEAT TREATMENT:

» **Note:** Subsequent heat treatment may lead to a deterioration of the mechanical properties.