

MATERIAL NO.:

3.3547

DESIGNATION:

DIN: AlMg4,5Mn
EN: AW-5083
AFNOR: A - G4,5MC
UNI: 7790
AISI: -

INDICATORY ANALYSIS:

Si 0.40
 Fe 0.40
 Cu 0.10
 Mn 0.40-1.00
 Mg 4.00-4.90
 Cr 0.05-0.25
 Zn 0.25
 Ti 0.15

COEFFICIENT OF THERMAL EXPANSION
 [10⁻⁶/K]

100°C	200°C	300°C	400°C	500°C	600°C	700°C
24.2	25.0	26.0				

STRENGTH:

- 68 - 75 HB (cast hardened)
 (≈ 230 - 260 N/mm²)
- min. 78 HB
 (≈ min. 270 N/mm²)

THERMAL CONDUCTIVITY AT 100°C: 110-140 $\frac{W}{m K}$

CHARACTER:

» Not hardenable, homogenised, annealed **aluminium alloy** with particularly good machining and welding properties; excellent dimensional stability; ideally suited for anodising, hard chrome plating and chemical nickel plating; very high resistance to corrosion

density: 2.66 kg/dm³
 coefficient of thermal expansion: 24.2 10⁻⁶m/mK
 max. temperature permanent/short term: 90/110°C

APPLICATION:

» Plates for mould bases, rotary tables, machined components for machine and jig construction, moulds for prototypes and foamed parts

TREATMENT BY:

» Polishing, EDM, etching:
 suitable

» Milling, welding:
 ideally suited

HEAT TREATMENT:

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