

LA Laser Alu material data sheet

Product

LA Laser Alu is made of anodised aluminum, which is suitable for laser engraving. The material thickness is 1.0 mm.

The surface is either silver or black anodized.

Material specifications

Alloy: Al Mn Mg 0.5 according to EN 573-3

Condition: hardness H24 and EN 485-2

Tensile strength RM: 145 - 185 MPa Yield strength Rp 0.2: >= 110 MPa Elongation at break A50: >= 4%

(all values measured transverse to the rolling direction)

Thickness: $1.0 \text{ mm} \pm 0.05 \text{ mm}$

Colour: metallic

Layer thicknesses: Anodic layer 5 - 25 µm

Laser capability: Surface suitable for laser engraving up

Temperature resistance: to 200° C

RoHs: RoH compliant material

Material resistance: Drilling emulsion Alusol 41B FHO 12% very good

Slideway oil BD68 very good Slideway oil Divinol T6 EP ISO 68 very good Hydraulic oil HLP46 very good

Transmission oil GEM 1-150N very good
Antifreeze Glysantin G48, S1, SF+ very good
Hydraulic oil Renolin ZAF 46 DT very good
Drilling emulsion Jokisch 10% very good

Wipe resistance: Benzine greater than 100,000 cycles

Dilution greater than 10,000 cycles Grease with graphite greater than 100,000 cycles Lubricating oil greater than 100,000 cycles Artificial greater than 100,000 cycles perspiration greater than 100,000 cycles Hydraulic oil greater than 100,000 cycles Drilling emulsion greater than 10,000 cycles Acetone greater than 100,000 cycles

Water Spirit

UV resistance

Laser labelled with mp-LM1 Arizona test (4600 MJ/year)

non-fade

greater than 10,000 cycles