

## LAM Laser Alumatt material data sheet

### Product

LAM Laser Alumatt is made of coated aluminum, which is suitable for laser engraving.  
The material thickness is 0.5 mm or 1.0 mm.

The coated surface appears black after laser engraving.

### Material specifications

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

Condition: hardness H48 and EN 1396

Tensile strength RM: 205 - 250 MPa

Yield strength Rp 0.2:  $\geq 180$  MPa

Elongation at break A50:  $\geq 2\%$

(All values measured transversely to the rolling direction)

Thickness: 0.5 mm  $\pm$  0.05 mm or 1.0 mm  $\pm$  0.05 mm

Colour: metallic

Layer thickness: approx. 28  $\mu$ m  $\pm$  4  $\mu$ m (black) and 15  $\mu$ m  $\pm$  3  $\mu$ m

Laser capability: Surface suitable for laser engraving

Temperature resistance: short-term 120° C (minutes range)

80° C (hourly range)

RoHs RoHs 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
	Frost protection Glysantin G48, S1, SF+	very good
	Hydraulic oil Renolin ZAF 46 DT Drilling	very good
	emulsion Jokisch 10%	good

Wipe resistance:	Benzine	greater than 100,000 cycles
	Dilution	greater than 10 cycles
	Grease with graphite	greater than 100,000 cycles
	Lubricating oil	greater than 100,000 cycles
	Artificial sweat	greater than 100,000 cycles
	Hydraulic oil	greater than 100,000 cycles
	Drilling emulsion	greater than 100,000 cycles
	Acetone	greater than 100 cycles
	Water	greater than 100,000 cycles
	Spirit	greater than 10,000 cycles

UV resistance

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