

Certificate

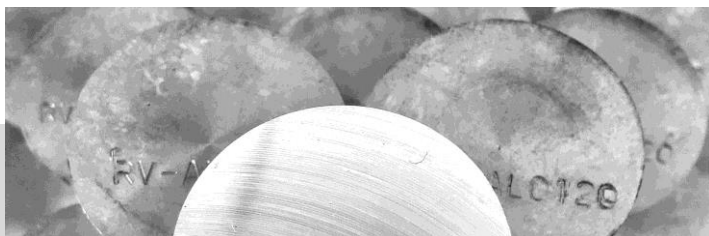
Certificate of Analysis

Reference Material AL 03/21 Aluminium Alloy Al MgSi1

Analyte	Certified value	Uncertainty
	Mass fraction in %	
Si	1,00	± 0,04
Fe	0,288	± 0,014
Cu	0,049	± 0,004
Mn	0,618	± 0,018
Mg	0,82	± 0,04
Cr	0,142	± 0,013
Ni	0,0068	± 0,0024
Zn	0,0326	± 0,006
Ti	0,047	± 0,004

Analyte	Certified value	Uncertainty
	Mass fraction in %	
Ca	< 0,0005	
Ga	0,0118	± 0,0016
Li	< 0,0002	
Na	< 0,0002	
Pb	0,0023	± 0,0009
Sn	< 0,003	
Sr	< 0,0002	
V	0,0099	± 0,0017

Date of issue: January 14, 2022



Reference material AL 03/21

Description

The base material for this Aluminium reference material has been taken from extruded rods with diameter of abt. 45 mm. The rods are taken from one lot. The rods have been cut into pieces of approx. 35 mm height. The elements Si, Fe, Cu, Mn, Mg, Cr, Zn, Ti, Ga and V have been tested for homogeneity according to ISO 13528:2015.

This reference material was certified in an interlaboratory test of 13 laboratories. The values given in this certificate are taken from the evaluation of the interlaboratory test.

The uncertainties were estimated at a 95 % confidence level, showing both the contribution of homogeneity and the uncertainties of the analytical methods used. The uncertainty values were calculated from the reproducibility standard deviations of the ILT with a coverage factor $k = 2$.

All values are valid only for a ring zone between 2 and 20 mm from the outer edge.

Recommended use

This reference material is intended for the verification of analytical methods, typically for S-OES, or for the calibration of analytical instruments.

Instructions for use

Before use, the surface of the material should be prepared by milling or turning on a lathe. Analysis should only be performed on material from the ring zone described above.

Storage information

This reference material should be stored in a dry and clean environment at room temperature.

Methods used for characterization

Spark emission spectrometry.

Disclaimer

We inspect and test to the best of our knowledge and belief and assume no further liability for the accuracy of the inspection and test.

Contact

For more information see www.metallogie.de/ringversuche/

META<L>LOGIE, c/o pdv-software GmbH
Im Schleeke 50, 38642 Goslar, Germany

E-Mail: ringversuch@metallogie.de