

Certificate

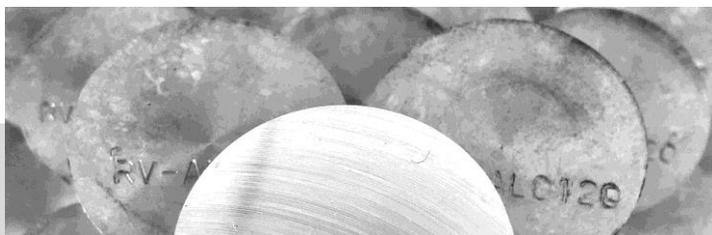
Certificate of Analysis

Reference Material 2203-AL Aluminium Alloy Al MgSi1Cu

Analyte	Certified value	Uncertainty
	Mass fraction in %	
Si	0,89	± 0,07
Fe	0,177	± 0,012
Cu	0,54	± 0,05
Mn	0,441	± 0,018
Mg	0,81	± 0,04
Cr	0,113	± 0,008
Ni	< 0,01	
Zn	0,030	± 0,008
Ti	0,0502	± 0,0029

Analyte	Certified value	Uncertainty
	Mass fraction in %	
Ca	< 0,0002	
Ga	0,0095	± 0,0023
Li	< 0,0002	
Na	< 0,0002	
Pb	< 0,003	
Sn	< 0,003	
Sr	< 0,0002	
V	0,0086	± 0,0011
Zr	0,106	± 0,016

Date of issue: May 30, 2022



Reference material 2203-AL

Description

The base material for this Aluminium reference material has been taken from extruded rods with diameter of abt. 48 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, Ti and Zr have been tested for homogeneity according to ISO 13528:2015.

This reference material was certified in an interlaboratory test of 10 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/

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