

Set-Up Sample

Certificate of Analysis

ISO
9001:2015

Product ID: IARM-ALSUS220-24

Product Description: High Purity Aluminum

Revision No.: 000
Revision Date: 01/17/2024

Description and Intended Use:

This Set-Up Sample (SUS) was processed under a quality management system that is registered/accredited to **ISO 9001**. This SUS is provided in the form of a solid disk. The intended use of this SUS may include, but is not limited to, routine instrument monitoring and drift correction of Arc-Spark OES and XRF Spectrometers.

Assigned Values listed in wt.%											
Ag	<0.0005	Cd	<0.0005	Ga	<0.0005	Mg	<0.0005	Pb	<0.0005	Ti	<0.002
B	<0.0030	Ce	<0.0015	Hf	<.001	Mn	<0.0003	Sb	<0.0030	V	<0.0010
Ba	<0.0001	Co	<.001	Hg	<0.0010	Mo	<0.0005	Sc	<0.0005	Y	<0.0030
Be	<0.0001	Cr	<0.0003	In	<0.0003	Na	<0.0030	Si	<0.002	Zn	<0.0010
Bi	<0.0010	Cu	0.001	La	<0.0003	Ni	<0.002	Sn	<0.0005	Zr	<0.0005
Ga	<0.0005	Fe	<0.0005	Li	<0.0001	P	<0.0010	Sr	<0.0001		

Homogeneity:

Homogeneity samples are selected by a systematic sampling procedure. The number of samples may be determined by the equation below, where N_{prod} is the number of units produced and N_{min} is the number of samples used for homogeneity testing. These samples are arranged in a simple randomized design such that each sample is analyzed multiple times. Homogeneity may also have been determined within sample using an applied version of ASTM E826.

$$N_{MIN} = \max(10, \sqrt[3]{N_{PROD}})$$

Instructions for Use:

The test surface is on the opposite side of the labeled surface, which includes the material identification. The assigned values are applicable for the entire thickness of the unit. Each packaged disk has been prepared by finishing the test surface using a lathe or a saw. The user must determine whether additional surface preparation is needed for their analytical technique. The user is cautioned to use care when either resurfacing the disk or performing additional polishing, as these processes may contaminate the surface. If resurfacing for use in an XRF spectrometer, the remaining depth of the disk must be greater than the infinite thickness of the x-ray emission lines being measured (typically 2-5mm in a metal matrix).

Period of Validity:

The assigned value of this material is valid indefinitely provided the material is handled and stored in accordance with the instructions stated on this certificate. The assigned values are nullified if the material is damaged, contaminated, otherwise modified, or used in a manner for which it was not intended.

Chuck Gordon

Chuck Goudreau, Certifying Officer

17 January 2024
Date Issued

Conditions of Sale and Supply: All CRMs, RMs & SUSs sold are subject to applicable LGC Standard Terms and Conditions of Sale.