

Product Information Sheet

RC11/07

Aluminium Base (Type of Standard) setting up sample

Indicative Values

alive values	T
Element	Mass content [%]
Silicon (Si)	(0.028)
Iron (Fe)	(0.046)
Copper (Cu)	(0.015)
Manganese (Mn)	(0.016)
Magnesium (Mg)	(0.018)
Chromium (Cr)	(0.011)
Nickel (Ni)	(0.010)
Zinc (Zn)	(0.020)
Titanium (Ti)	(0.015)
Silver (Ag)	(0.010)
Arsenic (As)	(0.005)
Barium (Ba)	(0.001)
Beryllium (Be)	(0.002)
Bismuth (Bi)	(0.010)
Calcium (Ca)	(0.0024)
Cadmium (Cd)	(0.0049)
Cerium (Ce)	(0.003)
Cobalt (Co)	(0.012)
Gallium (Ga)	(0.021)
Mercury (Hg)	(0.005)
Indium (In)	(0.010)
Lanthanum (La)	(0.012)
Lithium (Li)	(0.0008)
Molybdenum (Mo)	(0.026)
Sodium (Na)	(0.0015)
Phosphorus (P)	(0.0029)
Lead (Pb)	(0.015)
Antimony (Sb)	(0.012)
Scandium (Sc)	(0.010)
Tin (Sn)	(0.018)
Strontium (Sr)	(0.005)
Vanadium (V)	(0.017)
Tungsten (W)	(0.0047)
Zirconium (Zr)	(0.015)

Values in brackets () are not certified but given for information only.

Manufacturing

This setting up sample is produced using six strand hot top vertical continuous casting out of single melt.

Homogeneity

Homogeneity testing is performed by means of spark emission spectroscopy. Tests involve making multiple measurements on individual samples taken at regular intervals along the entire length of each cast rod. Depending on the mass content of the element, the relative standard deviation of 10 to 20 measurements within one disc is influenced by the material homogeneity and stability of the measurement instrument and is typically found to be as follows:

elements with concentration 0.01 % - 0.5 %	< 2 % relative standard deviation
elements with concentration < 0.01 %	< 10 % relative standard deviation
elements: As, Ce, Sb	5 % - 20 % relative standard deviation

Analysis

The analysis of this material was performed in our ISO/IEC 17025 accredited analytical lab (STS 0023) by sparc optical emission spectroscopy. This is a setting up sample. Only homogeneity of this standard is certified. No concentration values are certified. The values given in brackets have been determined using sparc source optical emission spectroscopy.

Description of Sample

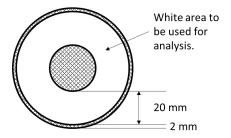
This setting up sample is available in the form of discs (approx. Ø 69 x 35 mm).

Intended use and Stability

This setting up sample is primarily intended for use in spark optical emission spectroscopy. Other applications are X-ray fluorescence spectrometry (XRF). The material will remain stable for the period given below (certification validity) if it is stored in a dry and clean environment at room temperature.

Instructions for Use

Calibration measurements should be made within a ring between 2mm and 22mm from the edge of the CRM face.



Dr. Benedikt Moser CTO

Suisse Technology Partners Ltd. Querstrasse 5 8212 Neuhausen am Rheinfall Switzerland

Phone: +41 52 551 11 00 Fax: +41 52 551 11 99 Email: refmat@suisse-tp.ch

Internet: https://reference-materials.ch

Date of certification: 10-Dec-2020
Certificate version 002: 12-Jan-2022
This certificate is valid until: Dec-2095

Patrik Bachmann Head of Inorganic Analytics