

Metal and Quality, LLC
CERTIFICATE OF ANALYSIS
DSZU CA011a
Stainless Steel



APPLICABILITY Reference material of stainless steel DSZU CA011a intended for calibration of analytical instruments based on inert gas fusion methods

CERTIFIED VALUES (mass fraction in %)

	N	H
Certified	0.0074	0.00011
Uncertainty C(95%)	0.0005	0.00003

Indicative content of oxygen is about 0.002%

SPECIFICATION Reference material is made of AISI 304 stainless steel in the form of polished pins with a diameter of about 4.8 mm and a weight of 1 gram

TRACEABILITY The RM DSZU CA011a is made by re-polishing the same ones stainless steel rods used to make the [CRM DSZU CA011](#). The metrological characteristics of RM DSZU CA011a have been confirmed as a result of processing multiple comparative measurements with the CRM DSZU CA011 using inert gas fusion method in four laboratories. The following certified reference materials and reference materials were also used to validate the analytical data: LECO 762-747 with 1.2 ppm hydrogen, BAM CRM H2 with 1.26 ppm hydrogen, DSZU CA032 with 0.00017% hydrogen and 0.0309% nitrogen, CRM CA013 with 0.0102 % nitrogen and 0.00068% hydrogen.

The uncertainties C(95%) DSZU CA011a are estimated taking into account the uncertainties of DSZU CRM CA011 and the additional uncertainties of the comparative analysis

DELIVERY 50 pins in glass bottle and a certificate of analysis

DATE OF ISSUE March 2025

VALID March 2035

SAFETY A Safety Data Sheet (SDS) is not required for DSZU CA011a. Material and packing does not contain hazardous chemical, explosives and radioactive substances and substances which might influence health and the environment

NOTE The reference material should be stored in a tightly closed bottle in a dry and cool place. Once the bottle has been opened for analysis, it should be closed immediately after use
Samples extracted from the bottle using clean metallic tweezers and placed directly into a carefully cleaned balance and boat device of analyzer

PARTICIPATING LABORATORIES

Dnepropetsstal (DSS) PJSC, Ukraine
E.O. Paton Electric Welding Institute, Ukraine
ENVIFORM a.s., Czech Republic
Motor PJSC, Ukraine

METHODS USED Inert gas fusion with infrared absorption and thermal conductivity

CONTACTS Metal and Quality, LLC
37 Nezalezhnoi Ukraine Street, Zaporizhzhya City 69019, Ukraine
Tel/fax: +380 6171718 00
rm@rm.co.ua
<https://rm.co.ua>