



Nickel Base Alloys



Solid disk and powder Nickel base Alloys CRMs



One of the key missions of the [Chemical and Biological Metrology Laboratory](#) of LNE is to establish the metrological traceability and to assess the uncertainty of analytical measurements. To this end, LNE implements primary reference methods and produces Certified Reference Materials (CRMs), for various applications in the field of industrial, environmental and health analysis.

CRMs are metrological tools to achieving the traceability of measurement results and therefore ensuring reliability and comparability of results of chemical analyses everywhere in the world. Ensuring traceability is moreover a requirement of ISO/CEI-17025 standard.

CRMs are mainly used to carry out analytical instruments calibration and analytical procedures validation.

All reference materials produced by the [Chemical and Biological Metrology Laboratory](#) of LNE are **Certified** Reference Materials, meaning that the traceability to SI (International System of Units) is fully ensured through primary methods of measurement. The quality of each CRM is fully documented in the certificate describing the way the traceability is established and providing the uncertainty of the certified value.

Most of the CRMs produced are covered by CMCs (Calibration and Measurement Capabilities) published in the BIPM (Bureau International des Poids et Mesures) database ensuring the equivalence of LNE capabilities with the other National Metrology Institutes worldwide. Accreditation against ISO Guide 34 for CRMs production is currently in progress.

There is a strong need for metallurgical testing laboratories to use Reference Materials to calibrate spectrometers for solid sample analysis.

Because only very few Nickel alloys CRMs are commercially available, LNE has produced 2 different types of Alloys for solid (disk) or liquid analysis (powder) :

- N C 15 Fe, Ni 73% - Cr 16 % - Fe 9 % - Nb 0.004 %
- N C 19 Fe Nb, Ni 53 % - Cr 17 % - Fe 19 % - Nb 5 %

These materials has been produced in collaboration with a French metallurgical company : IMPHY S.A.

Conditioning : For each type of alloys

Disk ($\varnothing = 30$ mm, thick 20 mm) or powder (bottle of 70 g)

Availability : Now available

Price : disk 280 - 350 € HT
powder 150 - 200 € HT

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