



# ISO 17034 AND ISO/IEC 17025 ACCREDITED



**Our production site for specialty gases at Rjukan is accredited for production and analysis of synthetic natural gas mixtures as Certified Reference Material (CRM).**

**Being the first company in Norway, Nippon Gases received ISO 17034 accreditation in November 2021.**

ISO 17034 - General requirements for the competence of reference material producers, is now the preferred accreditation standard for producers of reference materials. ISO 17025 is included in ISO 17034, but in addition it covers assessment of homogeneity and stability, requirements for production planning, and documentation.

Our Specialty gas production has been accredited according to ISO/IEC 17025 since 2012. This accreditation is specifically designed for testing and calibration laboratories, to verify their competence to produce valid data.

While the ISO 9001 standard is a recognized management tool that specifies the requirements for a company's quality system, it does not address the competence required in ISO 17034 and ISO/IEC 17025.

For more details about our accreditation, please visit:  
[www.akkreditert.no](http://www.akkreditert.no)

## Important ISO-accreditation

Proven competence distinguishes which producers can produce materials of consistent high quality, that are "fit for purpose".

Accreditation according to ISO 17034 and ISO/IEC 17025 is a proof of competence to produce and deliver products that can be relied on. The accreditation mark is recognized internationally, and benefits the customer.

The new attainment of ISO 17034 is another example of Nippon Gases commitment to quality, and supports the goal of constant improvement.

The ISO/IEC 17025 accreditation is widely sought by many of our customers. ISO 17034 is the new standard for reference materials. Certified reference materials (CRM) are a way to achieve metrological traceability, and the demand for ISO 17034-accreditation is expected to increase.

Nippon Gases, its subsidiaries and distributors deliver a large range of industrial and specialty gases, and ensures technical expertise and service to thousands of customers in Scandinavia.

## Nippon Gases Scope of accreditation

Applies to natural gas mixtures in the concentration range:		
	Measurement range/-fraction (% mol/mol)	Measurement capabilities expressed as expanded uncertainty (rel%):
Methane	55 - 100	0,2
Ethane	0,008 - 14	2 - 0,2
Propane	0,008 - 8	2 - 0,5
Isobutane	0,004 - 1,4	2 - 0,5
N-butane	0,004 - 1,4	2 - 0,5
Neopentane	0,0007 - 0,5	3 - 1
Isopentane	0,0025 - 0,6	2 - 1
N-pentane	0,0025 - 0,6	2 - 1
N-hexane	0,0008 - 0,35	3 - 1
N-heptane	0,01 - 0,03	2
CO <sub>2</sub>	0,04 - 25	2 - 0,2
N <sub>2</sub>	0,02 - 25	2 - 0,2
He	0,04 - 0,4	2 - 1

References:	
ISO 17034	General requirements for the competence of reference material producers.
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories.
ISO 6142-1	Gas analysis - Preparation of calibration gas mixtures. Gravimetric method.
ISO 6143	Gas analysis - Comparison methods for determining and checking the composition of
ISO 6975	Natural gas - Extended analysis - Gas chromatographic method.
ISO Guide 30, 31, 35	Guidance on reference materials.

