

## List of accredited test methodes

according to DIN EN ISO/IEC 17025:2018

Test area 1: Isotope Ratio Mass Spectrometry	Test method	Description	Status of the test method
1.1 Determination of the isotope ratio for the assessment of regional origin / origin / identity in solids and fluids by means of mass spectrometry	AIL-1.1a (2015-02)	$^{18}\text{O}/^{16}\text{O}$ in alcoholic beverages (<40Vol% alcohol)	flexible accredited by cat.II**
	AIL-1.1b (2015-02)	$^{18}\text{O}/^{16}\text{O}$ und D/H in water/tissue fluid	flexible accredited by cat.II**
	AIL-1.1c (2015-02)	$^{18}\text{O}/^{16}\text{O}$ , D/H, $^{13}\text{C}/^{12}\text{C}$ , $^{15}\text{N}/^{14}\text{N}$ and $^{34}\text{S}/^{32}\text{S}$ in agricultural commodities and products, water-free biomass, chemicals, foodstuffs, spices, luxury foodstuffs, pesticides, consumer products and wood	flexible accredited by cat.II**
	AIL-1.1d (2015-02)	$^{13}\text{C}/^{12}\text{C}$ in agricultural commodities and products for the assessment of the plant species (photosynthesis)	flexible accredited by cat.II**
1.2 Determination of the isotope ratio for the assessment of nutrition / fertilization in solids and fluids by means of mass spectrometry	AIL-1.2a (2015-02)	$^{15}\text{N}/^{14}\text{N}$ in agricultural commodities and fertilizer	flexible accredited by cat.II**
	AIL-1.2b (2015-02)	$^{13}\text{C}/^{12}\text{C}$ in agricultural commodities for the assessment of greenhouse cultivation	flexible accredited by cat.II**
	AIL-1.2c (2015-02)	$^{13}\text{C}/^{12}\text{C}$ and $^{15}\text{N}/^{14}\text{N}$ in feedstuffs and animal agricultural products	flexible accredited by cat.II**
	AIL-1.2d (2020-09)	$^{15}\text{N}/^{14}\text{N}$ in food	flexible accredited by cat.II**
1.3 Determination of the isotope ratio for the assessment of tampering in solids and fluids by means of mass spectrometry	AIL-1.3a (2015-02)	$^{13}\text{C}/^{12}\text{C}$ for assessment of added C4 sugars in juices and honey	flexible accredited by cat.II**
	AIL-1.3b (2015-02)	$^{13}\text{C}/^{12}\text{C}$ and D/H(l) in the ethanol of alcoholic beverages for assessment of chaptalization/fermentation basis	flexible accredited by cat.II**
	AIL-1.3c (2015-02)	$^{13}\text{C}/^{12}\text{C}$ in vanilla products for assessment of the naturalness of vanilla aromas	flexible accredited by cat.II**
	AIL-1.3d (2015-02)	$^{13}\text{C}/^{12}\text{C}$ in carbon dioxide in sparkling wine, semi-sparkling wine and beer	flexible accredited by cat.II**
	AIL-1.3e (2015-02)	$^{13}\text{C}/^{12}\text{C}$ , D/H and $^{18}\text{O}/^{16}\text{O}$ in vinegar for the assessment of the fermentation basis	flexible accredited by cat.II**
	AIL-1.3f (2020-09)	$^{13}\text{C}/^{12}\text{C}$ and D/H(l) in ethanol after fermentation for assessment of chaptalization/fermentation basis	flexible accredited by cat.II**
	AIL-1.3g (2021-03)	$^{13}\text{C}/^{12}\text{C}$ in carbon dioxide in mineral water	flexible accredited by cat.II**
	AIL-1.3h (2021-03)	D/H in vanilla products for assessment of the naturalness of vanilla aromas/origin of vanillin	flexible accredited by cat.II**

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Test area 2: Liquid Scintillation Spectrometry	Test method	Description	Status of the test method
2.1 Determination of C14 activity in solids, fluids, and gases by means of liquid scintillation spectrometry with the low level counter method	AIL-2.1a (2015-02)	14C activity for determination of the recent proportion in consumer products, combustibles, flavourings, flue gas, chemicals, lubricants and synthetic materials	flexible accredited by cat.II**
	AIL-2.1b (2020-09)	14C activity for assessment of CO2 from carbonic acid	flexible accredited by cat.II**
	AIL-2.1c (2021-03)	14C activity for determination of the recent proportion in food	flexible accredited by cat.II**
	DIN EN 15440 2011-05 Berichtigung 2012-10	Solid recovered fuels - Methods for the determination of biomass content (annex C)	<u>flexible accredited by cat.II**</u>
	DIN EN ISO 21644 2021-07	Solid recovered fuels - Methods for the determination of biomass content (annex A)	<u>flexible accredited by cat.II**</u>

Test area 3: Cavity Ring Down Spectroscopy (CRDS)	Test method	Description	Status of the test method
3.1 Procedures for the analysis of regional origin/origin/identity by means of laser technology	AIL-3.1a (2015-02)	D/H-Isotope analysis in water	accredited
	AIL-3.1b (2021-08)	<sup>18</sup> O/ <sup>16</sup> O-Isotope analysis in water	accredited

Within the areas of testing marked with \*\*, the laboratory is allowed to modify testing methods as well as to continue the development and newly develop testing methods without prior notification and approval of the DAkkS.

#### Abbreviations used:

AIL-xx Internal procedure of Agrosolab GmbH  
 DIN Deutsches Institut für Normung e. V. (German Institute for Standardisation)  
 EN European Standard  
 IEC International Electrotechnical Commission  
 ISO International Organisation for Standardisation