Bijlage bij accreditatie-certificaat
Annexe au certificat d'accréditation
Annex to the accreditation certificate
Beilage zur Akkreditierungszertifikat

054-TEST

EN ISO/IEC 17025:2005

Versie/Version/Fassung	16
Uitgiftedatum / Date d'émission / Issue date / Ausgabedatum:	31/10/2019
Geldigheidsperiode / Validité / Validity / Gültigkeitsdauer:	31/10/2019 - 24/03/2022

Nicole Meurée-Vanlaethem

Voorzitster van het Accreditatiebureau

La Présidente du Bureau d'Accréditation

Chair of the Accreditation Board

Vorsitzende des Akkreditierungsbüro

De accreditatie werd uitgereikt aan/ L'accréditation est délivrée à/
The accreditation is granted to/ Die akkreditierung wurde erteilt für:

LOVAP N.V.
Klaus-Michael Kuehnelaan, 11
2440 GEEL

LIJST MET AFKORTINGEN

A.S.L.	Amtliche Sammlung von Untersuchungsverfahren - Lebensmittel
CMA	Compendium voor Monstername en Analyse
DIN	Deutsches Institut für Normung
ISO	International organization for Standardization
ISO/R	International organization for Standardization/Recommendation
ISO/TC	International organization for Standardization/Technical Committee
KB	Koninklijk Besluit
EN	Europese Norm
NF V	Norme française - Viande
WAC	Water Analyse Compendium
XP V	Norme française de routine expérimentale - Viande

WETTELIJKE REFERENTIES

EG/152/2009 : *Verordening (EG) Nr. 152/2009 van de Commissie van 27 januari 2009 tot vaststelling van de bemonsterings- en analysemethoden voor de officiële controle van diervoeders*

MB 19/06/1995 *:* *Ministerieel besluit van 19 juni 1995 tot wijziging van het ministerieel besluit van 18 december 1973 tot bepaling van de laboratoriumtechnieken voor het opsporen van residuen van stoffen met een kiemgroeiremmende werking*

KB 29/10/1987: *Koninklijk Besluit tot vaststelling van de geldende referentiemethoden voor de ontleding van producten op basis van meel. Bijlage II: bepaling van het keukenzoutgehalte op de droge stof van brood en andere bakkerijproducten*

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
MICROBIOLOGISCHE PARAMETERS				
Eetwaren en/of dierenvoeders				
SM00132	Eetwaren	Anaeroob kiemgetal bij 37 °C	Telling	SP-VG M005
SM00413	Eetwaren en dierenvoeder, swabs	Aeroob mesofiel kiemgetal bij 30 °C	Telling	ISO 4833 -1
SM00417	Eetwaren	Coagulase positieve staphylococcen	Telling	ISO 6888-1
SM01574	Eetwaren en dierenvoeder, swabs	Enterobacteriaceae bij 37 °C	Telling	AFNOR BRD 07/24-11/13
SM00415	Eetwaren	Coliformen bij 30 °C	Telling	ISO 4832
SM00416	Eetwaren	Thermotolerante coliformen bij 44 °C	Telling	NF V08-060
SM00386	Eetwaren	Bacillus cereus bij 30 °C	Telling	ISO 7932
SM00404	Eetwaren	Beta-glucuronidase positieve Escherichia coli	Telling	ISO 16649-2
SM00407	Eetwaren en dierenvoeder	Clostridium perfringens	Telling	ISO 7937
SM00418	Eetwaren	Schimmels en gisten bij 25 °C	Telling	ISO 21527-1 en ISO21527-2
SM00699	Eetwaren en dierenvoeder	Sulfietreducerende anaëroben	Telling	ISO 15213
SM00405	Eetwaren	Melkzuurbacteriën	Telling	ISO 15214
SM00142	Eetwaren	Enterococcen	Telling	Afgeleid van NEN 6817
SM00406	Eetwaren	Telling van Listeria monocytogenes	Telling	AFNOR BRD-07/05-09/01
SM00977	Vlees -en vleeswaren	Campylobacter	Telling	Microval MV2008LR12
SM00199	Yoghurt	Lactobacillus bulgaricus en Streptococcus thermophilus	Telling	ISO 7889
SM00390	Yoghurt	Vermoedelijke Bifidobacterium	Telling	ISO 29981
SM00419	Eetwaren en dierenvoeder, Swabs	Salmonella	Opsporing	AFNOR BRD 07/11-12/05 Rapid Salmonella short protocol
SM01573	Eetwaren	Opsporing van Listeria en Listeria monocytogenes	Opsporing	AFNOR BRD-07/4-09/98
SM00408	Swabs			
SM01262	Vis, schaal- en schelpdieren	Potentieel enteropathogene Vibrio parahaemolyticus	Opsporing	ISO 21872
SM00813	Nieren	Opsporen van residuen van stoffen met kiemgroeiremmende werking	Agar diffusion	Officiële methode MB 1995/06/19 (New Belgian Kidney Test)

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
Waters				
SM00400	Drinkwater	Totaal kiemgetal bij 22 °C en bij 37 °C	Telling	ISO 6222 WAC/V/A/001
SM00047	Drinkwater	Coliformen en Escherichia coli	Telling na membraanfiltratie	ISO 9308-1 WAC/V/A/002
SM00403	Drinkwater	Enterococcen	Telling na membraanfiltratie	ISO 7899-2 WAC/V/A/003
SM00402	Drinkwater	Pseudomonas aeruginosa	Telling na membraanfiltratie	ISO 16266 WAC/V/A/006
SM01575	Flessenwater			AFNOR BRD 07/21-04/12 WAC/V/A/006
SM00380	Drinkwater	Clostridium perfringens	Telling na membraanfiltratie	ISO14189 WAC/V/A/007
SM00131	Drinkwater	Salmonella	Opsporing na membraanfiltratie	ISO 19250 WAC/V/A/004
ELISA en Real Time PCR				
SM00116	Eetwaren	Opsporen van wei-eiwit en caseïne-eiwit	ELISA	Methode gebaseerd op de Veratox kit (Neogen)
SM00182	Eetwaren	Opsporen van soya-eiwit	ELISA	Methode gebaseerd op de Veratox kit (Neogen)
SM00794	Eetwaren	Opsporen van gluten-eiwit	ELISA	Methode gebaseerd op de Veratox kit (Neogen)
SM01561	Eetwaren	Opsporen van DNA van varken	RT-PCR	Methode gebaseerd op kit van life technologies
SM01562	Eetwaren	Opsporen van DNA van rund	RT-PCR	Methode gebaseerd op kit van life technologies
SM01563	Eetwaren	Opsporen van DNA van paard	RT-PCR	Methode gebaseerd op kit van life technologies
SM04051	Eetwaren	GMO screening (p34, p 35, tNOS merkerelementen)	RT-PCR	Methode gebaseerd op kit van life technologies

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
ANORGANISCHE PARAMETERS				
Eetwaren en/of dierenvoeders				
SM00449	Eetwaren en dierenvoeder	Vocht (droge stof)	Gravimetrie	Gebaseerd op ISO 1442
SM00106	Gesuikerde eetwaren	Vocht (droge stof)	Gravimetrie - vacuüm	Gebaseerd op ISO 1742
SM00579	Eetwaren en dierenvoeder	Stikstof (eiwit)	Kjeldahl methode	ISO 1871
SM00022	Vlees en vleeswaren	Stikstof (eiwit)	Kjeldahl methode	ISO/R 937
SM00764	Eetwaren en dierenvoeder	Totale as	Gravimetrie	Gebaseerd op ISO 936
SM00586	Eetwaren en dierenvoeder	Reducerende suikers na inversie	Titrimetrie	Gebaseerd op EG/152/2009
SM01030	Eetwaren en dierenvoeder	Totaal vet	Gravimetrie (manueel)	Gebaseerd op ISO 1443
SM01031	Eetwaren en dierenvoeder	Totaal vet	Gravimetrie (geautomatiseerd)	Gebaseerd op ISO 1443
SM00122	Eetwaren	Totale voedingsvezels	Gravimetrie	Gebaseerd op A.S.L.00.00.18
SM00684	Eetwaren	Zetmeel	Enzymatische bepaling	Gebaseerd op kit Boehringer Mannheim (Starch, UV method)
SM00059	Eetwaren	Sulfiet	Enzymatische bepaling	Methode gebaseerd op Boehringer Mannheim (Sulfite, UV methode)
SM00333	Eetwaren	Citroenzuur	Enzymatische bepaling	Gebaseerd op kit Boehringer Mannheim (Citric acid, UV method)
SM00353	Eetwaren	Ascorbinezuur	Enzymatische bepaling	Methode gebaseerd op Boehringer Mannheim (L-Ascorbic acid, UV methode)
SM00123	Eetwaren	As onoplosbaar in HCl	Gravimetrie	Gebaseerd op ISO 763
SM00109	Eetwaren	Vrije vetzuren	Titrimetrie	Gebaseerd op Verordening (EU) 2016/1227
SM00110	Eetwaren	Peroxydegetal	Titrimetrie	Gebaseerd op Verordening (EEG) 2568/91
SM00192	Eetwaren	Dichtheid	Pyknometrie	Gebaseerd op ISO 2172
SM00744	Eetwaren met uitzondering van vlees en vleesproducten	pH	Potentiometrie	Gebaseerd op ISO 1842
SM00009	Vlees en vleeswaren	Zout	Volhard methode	ISO 1841
SM00012	Vlees en vleeswaren	pH	Potentiometrie	Gebaseerd op ISO 2917
SM00023	Vlees en vleeswaren	Vrij vet	Gravimetrie	ISO 1444
SM00026	Vlees en vleeswaren	Hydroxyproline	Spectrofotometrie	ISO 3496
SM00024	Vlees en vleeswaren	Nitriet	Spectrofotometrie	ISO 2918
SM00025	Vlees en vleeswaren	Nitraat	Spectrofotometrie	ISO 3091
SM00043	Vlees en vleeswaren	Totaal fosfor	Spectrofotometrie	Gebaseerd op NEN ISO 13730

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
SM00066	Vlees en vleeswaren	Glutaminezuur	Enzymatische bepaling	Methode gebaseerd op Boehringer Mannheim (L-glutaminic acid, colorimetric method)
SM00796	Vis	Vluchtige basen (TVB-N)	Destillatie en titrimetrie	Gebaseerd op Verordening (EG) 2074/2005
SM00010	Brood en andere bakkerijproducten	Keukenzout op droge stof	Titrimetrie en gravimetrie	KB van 29 oktober 1987 tot vaststelling van de geldige referentiemethoden voor de ontleding van producten op basis van meel
SM00103	Brood en andere bakkerijproducten	Droge stof	Gravimetrie	KB van 29 oktober 1987 tot vaststelling van de geldige referentiemethoden voor de ontleding van producten op basis van meel
SM00088	Producten op basis van groenten en fruit	Totale zuurheid	Titrimetrie	Gebaseerd op AOAC 942.15
SM00119	Producten op basis van groenten en fruit	Brix	Refractometrie	Gebaseerd op AOAC 932.14

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
Waters				
SM00013	Drink-, afval-, grond- en oppervlaktewater	Geleidbaarheid	Conductometrie	ISO 7888 WAC/III/A/004
SM00053	Drink-, afval-, grond- en oppervlaktewater	pH	Potentiometrie	WAC/III/A/005
SM00148	Drink-, grond-, oppervlakte- en afvalwater	Droogrest	Gravimetrie	WAC/III/A/001
SM00042	Drink-, grond- en oppervlaktewater	Bepaling van alkaliniteit en buffercapaciteit	Titrimetrie	ISO 9963-1 WAC/III/A/006
SM00041	Drinkwater	Totale hardheid	Titrimetrie	ISO 6059
SM01576	Drink-, grond-, oppervlakte- en afvalwater	Totale hardheid	berekening van de totale hardheid uit Ca en Mg na ICP-MS	WAC/III/A/009
SM00360	Drink-, grond-, oppervlaktewater	Opgelost Fluoride, chloride, nitraat, sulfaat, nitriet en orthofosfaat	anionen-chromatografie	NF EN ISO 10304 – 1 WAC/III/C/001
	Afvalwater	Opgelost Chloride, nitraat, sulfaat en orthofosfaat		
SM01199	absorptievloeistoffen	HCl	anionenchromatografie	LUC/III/001
SM00029	afvalwater	Totaal anorganisch gebonden fluoride	ionselectieve electrode	WAC/III/C/020
SM01222	absorptievloeistoffen	HF	ionselectieve electrode	LUC/III/006
SM01367	Absorptievloeistoffen	SO_x als sulfaat	anionenchromatografie	NF EN ISO 10304-1 LUC/III/008
SM00062	Drink-, afval-, grond- en oppervlaktewater	Nitriet	Spectrofotometrie	ISO 6777 WAC/III/C
SM00508	Afval-, grond- en oppervlaktewater	Ammonium stikstof (hoog niveau) (> 2.0 mg N/l)	Titrimetrie na destillatie	WAC/III/E/022
SM00634	Drink-, afval-, grond- en oppervlaktewater	Ammonium stikstof (laag niveau) (≤ 2.0 mg N/l)	Manuele spectrometrie	ISO 7150 WAC/III/E/020
SM00083	Afval- en oppervlaktewater	totaal o-fosfaat	Manuele spectrofotometrie met ammoniummolybdaat	ISO 6878 WAC/III/D
SM00052	Drink-, grond- en oppervlaktewater	Oxydeerbaarheid	Titrimetrie	ISO 8467 WAC/III/D/022
SM00152	Afval-, grond- en oppervlaktewater	Kjeldahlstikstof	Digestie en titratie	EN 25663 WAC/III/D/030
SM00154	Afval-, grond- en oppervlaktewater	Oliën en vetten (met petroleumether extraheerbare stoffen)	Gravimetrie	WAC/IV/B/005

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
SM00163	Afval-, grond- en oppervlaktewater	Vaste stoffen in suspensie	Gravimetrie	NF EN 872 WAC/III/D/002
SM00512	Afval-, grond- en oppervlaktewater	Bezinkbare stoffen	Imhoffkegel	WAC/III/D/001
SM00511	Afval-, grond- en oppervlaktewater	Chemische zuurstofverbruik (CZV)	Spectrofotometrie	ISO 15705 WAC/III/D/020
SM01044	Afvalwater	BOD bepaling na 5 dagen	Verdunning en enting met onderdrukking van nitrificatie – elektrochemie	ISO 5815-1 WAC/III/D/010
SM00537	Afval-, grond- en oppervlaktewater	Totaal N	Berekening: som van Kjeldahl-N, nitraat-N en nitriet-N	WAC/III/D
SM00663	Afval-, grond- en oppervlaktewater	Opgelost Cr (VI)	Spectrofotometrie	WAC/III/C
AAS/ICP PARAMETERS				
Eetwaren en/of dierenvoeders				
SM00446	Eetwaren en dierenvoeder	Natrium	Verassing en ICP-AES	Gebaseerd op A.S.L.07.00.56
SM01571	Eetwaren en dierenvoeding	Arseen, Cadmium, Kwik, Lood, Aluminium, Ijzer, Koper, Nikkel, Zink	microgolfdigestie en ICP-MS	Eigen methode
SM00074	Eetwaren	Tin	Verassing en ICP-OES	Eigen methode
Waters				
SM01569	Drink-, afval-, grond- en oppervlaktewater	Hg	ICP-MS	WAC/III/B/002 WAC/III/B/011 ISO 17294-01 en 02
SM04599	Drink-, afval-, grond- en oppervlaktewater	Ag, Al, As, B, Ba, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, P, Pb, Sb, Se, Zn	ICP-MS	WAC/III/B/002 WAC/III/B/011 ISO 17294-01 en 02
	Drinkwater, grondwater	Ca, Mg, K, Na		

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
CHROMATOGRAFISCHE PARAMETERS				
Eetwaren en/of dierenvoeders				
SM00002	Eetwaren	Benzoë- en sorbinezuur	HPLC-UV	Gebaseerd op A.S.L. 00.00-9
SM00716	Eetwaren	Vetzuurspectrum	Vetextractie, methylering en GC-FID detectie	Eigen methode
SM01410	Eetwaren	Glucose, Fructose, Saccharose, Maltose, Lactose, Sorbitol, Maltitol, Xylitol	LC-MSMS	Eigen methode
SM00230	Eetwaren	Wateroplosbare vitamines: Vitamine B1 (thiamine), Vitamine B2 (riboflavine), Vitamine B3 (niacine), Vitamine B5 (pantotheenzuur), Vitamine B6 (pyridoxine), Vitamine H (biotine)	LC-MSMS	Eigen methode met interne standaardisatie
SM00240	Eetwaren	Vetoplosbare vitamines: Vitamine A (retinol), Vitamine D2 (ergocalciferol), Vitamine D3 (cholecalciferol), Vitamine E (alfa-tocoferol)	LC-MSMS	Eigen methode met interne standaardisatie
SM00703	Eetwaren	Aspartaam, Saccharine, Acesulfam K	HPLC-UV	Eigen methode
SM00707	(Vaste en vloeibare) eetwaren	Cafeine	HPLC-UV	Eigen methode
SM00712	Chocolade en chocolade bevattende producten	Theobromine	HPLC-UV	Eigen methode
SM00040	Eetwaren	Synthetisch wateroplosbare kleurstoffen (kwalitatief)	TLC	Afgeleide van A.S.L. 26.11.03/14
SM00200	Eetwaren	Aflatoxines (G1, G2, B1, B2), Aflatoxine M1, Deoxynivalenol, Ochratoxine A, Fumonisine B1, Fumonisine B2, Toxine T2, Toxine HT2, Zearalenone	LC-MSMS	Eigen methode
SM00300	Eetwaren, dierenvoeder	Aflatoxines (G1, G2, B1, B2)	ELISA-screening	Eigen methode
SM00344	Fruit en groenten	Bromide en Nitraat	HPLC-IC	NF EN 12014-2

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
SM00809	Plantaardige matrices (*)	Residu’s van pesticiden (*)	QuEChERS methode met GC-MSMS en LC-MSMS	EN 15662
SM00809 (**)	Voedsel van dierlijke oorsprong: eieren & eierproducten, vlees	Fipronil en Fipronil sulfon	QuEChERS methode met GC-MSMS en LC-MSMS	eigen methode
SM00802	Groenten en fruit	Dithiocarbamaten	GC-MS headspace	EN 12396-02
SM00941	Ananas	Residu's van ethephon	QuPPe methode met LC-MSMS	Eigen methode
SM01400	Eetwaren	Acrylamide	LC-MSMS	Eigen methode met interne standaardisatie
	(*) In het kader van zijn accreditatie heeft het laboratorium de toelating alle parameters, behorende tot de groep (van parameters) vermeld in de tweede kolom, te bepalen voor alle producten, behorende tot de groep (van producten) vermeld in de eerste kolom. Deze toelating wordt gegeven op voorwaarde dat een aangepaste validatie wordt uitgevoerd overeenkomstig het globaal validatie concept, zoals vastgelegd in het kwaliteitssysteem van het laboratorium (en overeenkomstig het document BELAC 2-104”Criteria waaraan de geaccrediteerde laboratoria moeten beantwoorden die een flexibele scope aanvragen voor analyse van residu's van pesticiden in plantaardige producten”). Het laboratorium houdt, ten behoeve van elke aanvrager, een geactualiseerde lijst bij van de specifieke beproevingen en producten die onder de voornoemde groepen vallen. Opvraagbaar via E-mail: info@lovap.be (**) gevalideerd volgens beschikking "2002/657/EG" en de actuele versie van het SANTE document.			

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP		MEETPRINCIPE	METHODE
Waters en adsorptiepatronen					
SM00155	Afvalwater en grondwater	minerale olie		GC-FID	WAC/IV/B/025
SM00489	Drink-, oppervlakte-, en afvalwater	vluchtige organische chloorkoolwaterstoffen, mono-aromatische KWS		GC-MS/headspace	WAC/IV/A/016
		1,1-dichlooretheen	Isopropylbenzeen		
		Dichloormethaan	1,2,3-trichloorpropaan		
		1,2-dichlooretheen, trans	2-chloortolueen		
		1,1-dichloorethaan	3-chloortolueen		
		1,2- dichlooretheen, cis	4-chloortolueen		
		Chloroform	1,3-dichloorbenzeen		
		1,1,1-trichloorethaan	1,4-dichloorbenzeen		
		1,2-dichloorethaan	1,2-dichloorbenzeen		
		koolstoftetrachloride	1,3,5-trichoorbenzeen		
		Trichlooretheen	1,2,4-trichloorbenzeen		
		Broomdichloormethaan	1,2,3-trichloorbenzeen		
		1,1,2-trichloorethaan	Naftaleen		
		Dibroomchloormethaan	1,3-dichloorpropaan		
		Tetrachlooretheen	1,2-dibroomethaan		
		Chloorbenzeen	1,1,1,2-tetrachloorethaan		
		Chloorethaan	vinylchloride		
		Trichloorfluormethaan	broombenzeen		
		2,2-dichloorpropaan	n-propylbenzeen		
		Broomchloormethaan	1,3,5-trimethylbenzeen		
		1,1-dichloorpropeen	tert-butylbenzeen		
		1,2-dichloorpropaan	1,2,4-trimethylbenzeen		
		Dibroommethaan	sec-butylbenzeen		
		1,3-dichloorpropeen, cis	p-isopropyltolueen		
		1,3-dichloorpropeen, trans	n-butylbenzeen		
		Styreen	1,2-dibroom-3-chloorpropaan		
		bromoform	Hexachloorbutadieen		
		1,1,2,2-tetrachloorethaan	1,2,3-trimethylbenzeen		
		BETXs (benzeen, ethylbenzeen, tolueen, m + p-xyleen, o-xyleen)			
		MTBE (methyl-tert.butylether)			

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP		MEETPRINCIPE	METHODE
SM00723	Drinkwater	Poly-aromatische koolwaterstoffen (PAK) (Borneff)		HPLC-FLD	Eigen methode
		benzo(a)pyreen	indeno(1,2,3-cd)pyreen		
		benzo(b)fluorantheen	benzo(ghi)peryleen		
		benzo(k)fluorantheen			
SM01254	Drinkwater	Acrylamide		LC-MSMS	Eigen methode met interne standaardisatie
SM01369	Op carboxen 1000 geadsorbeerde moleculen	Alcoholen en ketonen		GC-MS	LUC/IV/007 LUC/IV/009
SM01232	Op aktief kool geadsorbeerde moleculen	Aromatische KWS, alifatische halogeen KWS, paraffinische acrylaten, esters, ethers, KWS		GC-MS	LUC/IV/001-002-004-006-008

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
BEMONSTERINGEN				
SM00556	Afvalwater	Debietmeting	met alle types van meetschotten	WAC/I/A/004 WAC/I/A/012
SM00560	Afval- en oppervlaktewater	Proportionele bemonstering	(tijdsgebonden)	WAC/I/A/004
SM00561	Afvalwater	Proportionele bemonstering	(debietsgebonden – ultrasoon debietmeter of borrelbuisprincipe)	WAC/I/A/004 WAC/I/A/012
SM00562	Grondwater	Staalname	(peilbuizen)	CMA/1/A.2 WAC/I/A/005
SM01200	Gasemissies	Volumedebiet en gassnelheid met pitotbuis	drukverschil mbv pitotbuis	LUC/0/004
		Meting van rookgastemperatuur	thermokoppel	LUC/0/002
SM01201	Gasemissies	Stofbemonstering en analyse	gravimetrische methode	LUC/I/001 LUC/0/005
SM01203	Gasemissies	Waterdampgehalte in afgassen	condensatie/adsorptie met silicagel	LUC/0/003
SM01204	Gasemissies	Gasvormig anorganisch HF	aanzuiging met verwarmde sonde in het gaskanaal en absorptie van gasvormig anorganisch HF in NaOH 0,1 N	LUC/III/006
SM01205	Gasemissies	Gasvormig anorganisch HCl	aanzuiging met verwarmde sonde in het gaskanaal en absorptie van gasvormig anorganisch HCl in water	LUC/III/0001
SM01366	Gasemissies	Gasvormig SO_x	aanzuiging met specifieke sonde en absorptie in H_2O_2	LUC/III/008
SM01207	Gasemissies	Monitoring van zuurstof, CO_2, CO, SO_2 en NO_X	O_2: paramagnetisme CO, CO_2, SO_2: IR NOx: chemoluminescentie	LUC/II/001
SM01208	Gasemissies	Totaal gehalte aan organische koolstof	FID detectie	LUC/II/001
SM01233	Gasemissies	Bemonstering van organische componenten met adsorptiepatronen	aanzuiging op aktief kool/carboxen 1000	LUC/IV/000

TEST-CODE	MATRIX	GEMETEN EIGENSCHAP	MEETPRINCIPE	METHODE
EXTERNE METINGEN *(in situ)*				
SM00147	Afval-, grond- en oppervlaktewater	Temperatuur		WAC/I/A/011
SM00149	Afval-, grond- en oppervlaktewater	Opgeloste zuurstof	Chemiluminescentie	WAC/I/A/011 CMA/2/I/A.7
SM00690	Afval-, grond- en oppervlaktewater	Geleidbaarheid	Conductometrische doorstroomcel	WAC/I/A/011 CMA/2/I/A.2
SM01196	Afval-, grond- en oppervlaktewater	pH	Potentiometrie	WAC/I/A/011 CMA/2/I/A.1

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
MICROBIOLOGICAL PARAMETERS				
Food and/or feed				
SM00132	Food	Anaerobic plate count at 37 °C	Enumeration	SP-VG M005
SM00413	Food and feed, swabs	Aerobic mesophilic plate count at 30 °C	Enumeration	ISO 4833 -1
SM00417	Food	Coagulase positive staphylococci	Enumeration	ISO 6888-1
SM01574	Food and feed, swabs	Enterobacteriaceae at 37 °C	Enumeration	AFNOR BRD 07/24-11/13
SM00415	Food	Coliforms at 30 °C	Enumeration	ISO 4832
SM00416	Food	Thermotolerant coliforms at 44 °C	Enumeration	NF V08-060
SM00386	Food	Bacillus cereus at 30 °C	Enumeration	ISO 7932
SM00404	Food	Beta-glucuronidase positive Escherichia coli	Enumeration	ISO 16649-2
SM00407	Food and feed	Clostridium perfringens	Enumeration	ISO 7937
SM00418	Food	Fungi and Yeasts at 25 °C	Enumeration	ISO 21527-1 and ISO21527-2
SM00699	Food and feed	Sulfite reducing anaerobes	Enumeration	ISO 15213
SM00405	Food	Lactic acid bacteria	Enumeration	ISO 15214
SM00142	Food	Enterococci	Enumeration	Derived from NEN 6817
SM00406	Food	Enumeration of Listeria monocytogenes	Enumeration	AFNOR BRD-07/05-09/01
SM00977	Meat and meat products	Campylobacter	Enumeration	Microval MV2008LR12
SM00199	Yogurt	Lactobacillus bulgaricus and Streptococcus thermophilus	Enumeration	ISO 7889
SM00390	Yogurt	Presumptive Bifidobacterium	Enumeration	ISO 29981
SM00419	Food and feed, swabs	Salmonella	Detection	AFNOR BRD 07/11-12/05 Rapid Salmonella short protocol
SM01573	Food	Detection of Listeria and Listeria monocytogenes	Detection	AFNOR BRD-07/4-09/98
SM00408	Swabs			
SM01262	Fish, crustaceans and shellfish	Potentially enteropathogenic Vibrio parahaemolyticus	Detection	ISO 21872
SM00813	Kidneys	Detection of residues of substances with a growth inhibitory effect	Agar diffusion	Official method MB 1995/06/19 (New Belgian Kidney Test)

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
Waters				
SM00400	Drinking water	Total plate count at 22 °C and at 37 °C	Enumeration	ISO 6222 WAC/V/A/001
SM00047	Drinking water	Coliforms and Escherichia coli	Enumeration after membrane filtration	ISO 9308-1 WAC/V/A/002
SM00403	Drinking water	Enterococci	Enumeration after membrane filtration	ISO 7899-2 WAC/V/A/003
SM00402	Drinking water	Pseudomonas aeruginosa	Enumeration after membrane filtration	ISO 16266 WAC/V/A/006
SM01575	Bottled water			AFNOR BRD 07/21-04/12 WAC/V/A/006
SM00380	Drinking water	Clostridium perfringens	Enumeration after membrane filtration	ISO14189 WAC/V/A/007
SM00131	Drinking water	Salmonella	Detection after membrane filtration	ISO 19250 WAC/V/A/004
ELISA and Real Time PCR				
SM00116	Food	Detection of whey protein and casein protein	ELISA	Method based on Veratox kit (Neogen)
SM00182	Food	Detection of soy protein	ELISA	Method based on Veratox kit (Neogen)
SM00794	Food	Detection of gluten protein	ELISA	Method based on Veratox kit (Neogen)
SM01561	Food	Detection of pork DNA	RT-PCR	Method based on kit from life technologies
SM01562	Food	Detection of beef DNA	RT-PCR	Method based on kit from life technologies
SM01563	Food	Detection of horse DNA	RT-PCR	Method based on kit from life technologies
SM04051	Food	GMO screening (p34, p 35, tNOS marker elements)	RT-PCR	Method based on kit from life technologies

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
INORGANIC PARAMETERS				
Food and/or feed				
SM00449	Food and feed	Moisture (dry matter)	Gravimetry	Based on ISO 1442
SM00106	Sugared food	Moisture (dry matter)	Gravimetry - vacuum	Based on ISO 1742
SM00579	Food and feed	Nitrogen (protein)	Kjeldahl method	ISO 1871
SM00022	Meat and meat products	Nitrogen (protein)	Kjeldahl method	ISO/R 937
SM00764	Food and feed	Total ash	Gravimetry	Based on ISO 936
SM00586	Food and feed	Reducing sugars after inversion	Titrimetry	Based on EG/152/2009
SM01030	Food and feed	Total fat	Gravimetry (manual)	Based on ISO 1443
SM01031	Food and feed	Total fat	Gravimetry (automated)	Based on ISO 1443
SM00122	Food	Total dietary fiber	Gravimetry	Based on A.S.L.00.00.18
SM00684	Food	Starch	Enzymatic determination	Based on kit Boehringer Mannheim (Starch, UV method)
SM00059	Food	Sulfite	Enzymatic determination	Method based on Boehringer Mannheim (Sulfite, UV method)
SM00333	Food	Citric acid	Enzymatic determination	Based on kit Boehringer Mannheim (Citric acid, UV method)
SM00353	Food	Ascorbic acid	Enzymatic determination	Method based on Boehringer Mannheim (L-Ascorbic acid, UV method)
SM00123	Food	Ash insoluble in HCl	Gravimetry	Based on ISO 763
SM00109	Food	Free fatty acids	Titrimetry	Based on Regulation (EU) 2016/1227
SM00110	Food	Peroxide value	Titrimetry	Based on Regulation (EEG) 2568/91
SM00192	Food	Density	Pyknometry	Based on ISO 2172
SM00744	Food with the exception of meat and meat products	pH	Potentiometry	Based on ISO 1842
SM00009	Meat and meat products	Salt	Volhard method	ISO 1841
SM00012	Meat and meat products	pH	Potentiometry	Based on ISO 2917
SM00023	Meat and meat products	Free fat	Gravimetry	ISO 1444
SM00026	Meat and meat products	Hydroxyproline	Spectrophotometry	ISO 3496
SM00024	Meat and meat products	Nitrite	Spectrophotometry	ISO 2918
SM00025	Meat and meat products	Nitrate	Spectrophotometry	ISO 3091
SM00043	Meat and meat products	Total phosphorus	Spectrophotometry	Based on NEN ISO 13730

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
SM00066	Meat and meat products	Glutaminic acid	Enzymatic determination	Method based on Boehringer Mannheim (L-glutaminic acid, colorimetric method)
SM00796	Fish	Total volatile basic nitrogen (TVB-N)	Destillation and titrimetry	Based on Regulation (EG) 2074/2005
SM00010	Bread and other bakery products	Table salt on dry matter	Titrimetry and gravimetry	Royal Decree of 29 October 1987 establishing the valid reference methods for the decomposition of products based on flour
SM00103	Bread and other bakery products	Dry matter	Gravimetry	Royal Decree of 29 October 1987 establishing the valid reference methods for the decomposition of products based on flour
SM00088	Products based on fruits and vegetables	Total acidity	Titrimetry	Based on AOAC 942.15
SM00119	Products based on fruits and vegetables	Brix	Refractometry	Based on AOAC 932.14

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
Waters				
SM00013	Drinking water, waste water, ground water and surface water	Conductivity	Conductometry	ISO 7888 WAC/III/A/004
SM00053	Drinking water, waste water, ground water and surface water	pH	Potentiometry	WAC/III/A/005
SM00148	Drinking water, waste water, ground water and surface water	Dry residue	Gravimetry	WAC/III/A/001
SM00042	Drinking water, ground water and surface water	Determination of alkalinity and buffer capacity	Titrimetry	ISO 9963-1 WAC/III/A/006
SM00041	Drinking water	Total hardness	Titrimetry	ISO 6059
SM01576	Drinking water, waste water, ground water and surface water	Total hardness	calculation of total hardness from Ca and Mg after ICP-MS	WAC/III/A/009
SM00360	Drinking water, ground water and surface water	Dissolved fluoride, chloride, nitrate, sulfate, nitrite and orthophosphate	anion chromatography	NF EN ISO 10304 – 1 WAC/III/C/001
	Waste water	Dissolved chloride, nitrate, sulfate and orthophosphate		
SM01199	Absorption liquid	HCl	anion chromatography	LUC/III/001
SM00029	Waste water	Total inorganic bonded fluoride	ion-selective electrode	WAC/III/C/020
SM01222	Absorption liquid	HF	ion-selective electrode	LUC/III/006
SM01367	Absorption liquid	SO_x as sulfate	anion chromatography	NF EN ISO 10304-1 LUC/III/008
SM00062	Drinking water, waste water, ground water and surface water	Nitrite	Spectrophotometry	ISO 6777 WAC/III/C
SM00508	Waste water, ground water and surface water	Ammonium nitrogen (high level) (> 2,0 mg N/l)	Titrimetry after destillation	WAC/III/E/022
SM00634	Drinking water, waste water, ground water and surface water	Ammonium nitrogen (low level) (≤ 2,0 mg N/l)	Manual spectrometry	ISO 7150 WAC/III/E/020
SM00083	Waste water and surface water	Total o-phosphate	Manual spectrophotometry with ammonium molybdate	ISO 6878 WAC/III/D
SM00052	Drinking water, ground water and surface water	Oxidizability	Titrimetry	ISO 8467 WAC/III/D/022
SM00152	Waste water, ground water and surface water	Kjeldahl nitrogen	Digestion and titration	EN 25663 WAC/III/D/030
SM00154	Waste water, ground water and surface water	Oils and fats (with petroleum ether extractable substances)	Gravimetry	WAC/IV/B/005

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
SM00163	Waste water, ground water and surface water	Suspended solids	Gravimetry	NF EN 872 WAC/III/D/002
SM00512	Waste water, ground water and surface water	Settable solids	Imhoff cone	WAC/III/D/001
SM00511	Waste water, ground water and surface water	Chemical oxygen demand (COD)	Spectrophotometry	ISO 15705 WAC/III/D/020
SM01044	Waste water	BOD determination after 5 days	Dilution and seeding with suppression of nitrification - electrochemistry	ISO 5815-1 WAC/III/D/010
SM00537	Waste water, ground water and surface water	Total N	Calculation: sum of Kjeldahl-N, nitrate-N en nitrite-N	WAC/III/D
SM00663	Waste water, ground water and surface water	Dissolved Cr (VI)	Spectrophotometry	WAC/III/C
AAS/ICP PARAMETERS				
Food and/or feed				
SM00446	Food and feed	Sodium	ashing and ICP-AES	Based on A.S.L.07.00.56
SM01571	Food and feed	Arsenic, Cadmium, Mercury, Lead, Aluminium, Iron, Copper, Nickel, Zinc	microwave digestion and ICP-MS	In house method
SM00074	Food	Tin	ashing and ICP-OES	In house method
Waters				
SM01569	Drinking water, waste water, ground water and surface water	Hg	ICP-MS	WAC/III/B/002 WAC/III/B/011 ISO 17294-01 and 02
SM04599	Drinking water, waste water, ground water and surface water	Ag, Al, As, B, Ba, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, P, Pb, Sb, Se, Zn	ICP-MS	WAC/III/B/002 WAC/III/B/011 ISO 17294-01 and 02
	Drinking water and ground water	Ca, Mg, K, Na		

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
CHROMATOGRAPHIC PARAMETERS				
Food and/or feed				
SM00002	Food	Benzoic acid and sorbic acid	HPLC-UV	Based on A.S.L. 00.00-9
SM00716	Food	Fatty acid spectrum	Fat extraction, methylation and GC-FID detection	In house method
SM01410	Food	Glucose, Fructose, Sucrose, Maltose, Lactose, Sorbitol, Maltitol, Xylitol	LC-MSMS	In house method
SM00230	Food	Water soluble vitamins: Vitamin B1 (thiamine), Vitamin B2 (riboflavin), Vitamin B3 (niacin), Vitamin B5 (pantothenic acid), Vitamin B6 (pyridoxine), Vitamin H (biotin)	LC-MSMS	In house method with internal standardization
SM00240	Food	Fat soluble vitamins: Vitamin A (retinol), Vitamin D2 (ergocalciferol), Vitamin D3 (cholecalciferol), Vitamin E (alfa-tocopherol)	LC-MSMS	In house method with internal standardization
SM00703	Food	Aspartame, Saccharin, Acesulfam K	HPLC-UV	In house method
SM00707	(Solid and liquid) food	Caffeine	HPLC-UV	In house method
SM00712	Chocolate and chocolate containing products	Theobromine	HPLC-UV	In house method
SM00040	Food	Synthetic water soluble colorants (qualitative)	TLC	Derived from A.S.L. 26.11.03/14
SM00200	Food	Aflatoxins (G1, G2, B1, B2), Aflatoxin M1, Deoxynivalenol, Ochratoxin A, Fumonisin B1, Fumonisin B2, Toxin T2, Toxin HT2, Zearalenone	LC-MSMS	In house method
SM00300	Food and feed	Aflatoxins (G1, G2, B1, B2)	ELISA-screening	In house method
SM00344	Fruit and vegetables	Bromide and Nitrate	HPLC-IC	NF EN 12014-2

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
SM00809	Plant matrices (*)	Residues of pesticides (*)	QuEChERS method with GC-MSMS and LC-MSMS	EN 15662
SM00809 (**)	Food of animal origin: eggs & egg products, meat	Fipronil and Fipronil sulfon	QuEChERS method with GC-MSMS and LC-MSMS	In house method
SM00802	Fruit and vegetables	Dithiocarbamates	GC-MS headspace	EN 12396-02
SM00941	Pineapple	Residues of ethephon	QuPPe method with LC-MSMS	In house method
SM01400	Food	Acrylamide	LC-MSMS	In house method with internal standardization
	(*) In the context of its accreditation, the laboratory has the permission to determine all parameters belonging to the group (of parameters) mentioned in the second column, for all products belonging to the group (of products) mentioned in the first column. This authorization is granted on the condition that an adapted validation is carried out in accordance with the global validation concept, as laid down in the quality system of the laboratory (and in accordance with the document BELAC 2-104 "Criteria that accredited laboratories must meet that request a flexible scope for analysis of pesticides residues in plant products"). For each applicant, the laboratory keeps an up-to-date list of the specific tests and products that belong to the aforementioned groups. Can be requested via E-mail: info@lovap.be *(**) validated according to decision "2002/657/EC" and the current version of the SANTE document.*			

TEST-CODE	MATRIX	MEASURED PARAMETERS		MEASUREMENT PRINCIPLE	METHOD
Waters and adsorption tubes					
SM00155	Waste water and ground water	Mineral oil		GC-FID	WAC/IV/B/025
SM00489	Drinking water, surface water and waste water	Volatile organic chlorinated hydrocarbons, mono aromatic hydrocarbons		GC-MS/headspace	WAC/IV/A/016
		1,1-dichloroethylene	Isopropylbenzene		
		Dichlorormethane	1,2,3-trichloropropane		
		1,2-dichloroethylene, trans	2-chlorotoluene		
		1,1-dichloroethane	3-chlorotoluene		
		1,2-dichloroethylene, cis	4-chlorotoluene		
		Chloroform	1,3-dichlorobenzene		
		1,1,1-trichloroethane	1,4-dichlorobenzene		
		1,2-dichloroethane	1,2-dichlorobenzene		
		Carbon tetrachloride	1,3,5-trichorobenzene		
		Trichloroethylene	1,2,4-trichlorobenzene		
		Bromodichloromethane	1,2,3-trichlorobenzene		
		1,1,2-trichloroethane	Naphthalene		
		Dibromochloromethane	1,3-dichloropropane		
		Tetrachloroethylene	1,2-dibromoethane		
		Chlorobenzene	1,1,1,2-tetrachloroethane		
		Chloroethane	Vinylchloride		
		Trichlorofluoromethane	Bromobenzene		
		2,2-dichloropropane	n-propylbenzene		
		Bromochloromethane	1,3,5-trimethylbenzene		
		1,1-dichloropropene	tert-butylbenzene		
		1,2-dichloropropane	1,2,4-trimethylbenzene		
		Dibromomethane	sec-butylbenzene		
		1,3-dichloropropene, cis	p-isopropyltoluene		
		1,3-dichloropropene, trans	n-butylbenzene		
		Styrene	1,2-dibromo-3-chloropropane		
		Bromoform	Hexachlorobutadiene		
		1,1,2,2-tetrachloroethane	1,2,3-trimethylbenzene		
		BETXs (benzene, ethylbenzene, toluene, m + p-xylene, o-xylene)			
		MTBE (methyl-tert.butylether)			

TEST-CODE	MATRIX	MEASURED PARAMETERS		MEASUREMENT PRINCIPLE	METHOD
SM00723	Drinking water	Poly aromatic hydrocarbons (PAH) (Borneff)		HPLC-FLD	In house method
		benzo(a)pyrene	indeno(1,2,3-cd)pyrene		
		benzo(b)fluoranthene	benzo(ghi)perylene		
		benzo(k)fluoranthene			
SM01254	Drinking water	Acrylamide		LC-MSMS	In house method with internal standardization
SM01369	On carboxen 1000 adsorbed molecules	Alcohols and ketons		GC-MS	LUC/IV/007 LUC/IV/009
SM01232	On activated carbon adsorbed molecules	Aromatic hydrocarbons, aliphatic halogen hydrocarbons, paraffinic acrylates, esters, ethers, hydrocarbons		GC-MS	LUC/IV/001-002-004-006-008

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
SAMPLING METHODS				
SM00556	Waste water	Flow measurement	with all types of venturi flumes	WAC/I/A/004 WAC/I/A/012
SM00560	Waste water and surface water	Proportional sampling	(time related)	WAC/I/A/004
SM00561	Waste water	Proportional sampling	(flow related – ultrasonic flow meter or bubble tube level system)	WAC/I/A/004 WAC/I/A/012
SM00562	Ground water	Sampling	(monitoring wells)	CMA/1/A.2 WAC/I/A/005
SM01200	Gas emissions	Volume flow and gas velocity using pitot tube	pressure difference using pitot tube	LUC/0/004
		Measurement of waste gas temperature	thermocouple	LUC/0/002
SM01201	Gas emissions	Dust sampling and analysis	gravimetric method	LUC/I/001 LUC/0/005
SM01203	Gas emissions	Water vapour in waste gases	condensation/adsorption with silicagel	LUC/0/003
SM01204	Gas emissions	Gaseous inorganic HF	suction with heated probe in the gas channel and absorption of gaseous inorganic HF in NaOH 0,1 N	LUC/III/006
SM01205	Gas emissions	Gaseous inorganic HCl	suction with heated probe in the gas channel and absorption of gaseous inorganic HCl in water	LUC/III/0001
SM01366	Gas emissions	Gaseous SO_x	suction with specific probe and absorption in H_2O_2	LUC/III/008
SM01207	Gas emissions	Monitoring of oxygen, CO_2, CO, SO_2 and NO_X	O_2: paramagnetism CO, CO_2, SO_2: IR NOx: chemoluminescense	LUC/II/001
SM01208	Gas emissions	Total amount of organic carbons	FID detection	LUC/II/001
SM01233	Gas emissions	Sampling of organic compounds with adsorption tubes	Suction on activated carbon/carboxen 1000	LUC/IV/000

TEST-CODE	MATRIX	MEASURED PARAMETERS	MEASUREMENT PRINCIPLE	METHOD
EXTERNAL MEASUREMENTS *(in situ)*				
SM00147	Waste water, ground water and surface water	Temperature		WAC/I/A/011
SM00149	Waste water, ground water and surface water	Dissolved oxygen	Chemiluminescense	WAC/I/A/011 CMA/2/I/A.7
SM00690	Waste water, ground water and surface water	Conductivity	Conductometric flow cell	WAC/I/A/011 CMA/2/I/A.2
SM01196	Waste water, ground water and surface water	pH	Potentiometry	WAC/I/A/011 CMA/2/I/A.1