

ANNEXE TECHNIQUE INTERNE

AGRIFOOD DEPARTEMENT

PHYTOCONTROL ANALYTICS France

Version 48 - 15 June 2021

References:

Technical Annexe Cofrac N° 1-1904 rév. 17

Technical Annexe Cofrac N° 1-6066 rév. 17

LABORATOIRE PHYTOCONTROL (1)

Parc Scientifique Georges Besse II 180, rue Philippe Maupas 30035 NIMES, sous le numéro d'accréditation N° 1-1904

LABORATOIRE PHYTOCONTROL (2)

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sous le numéro d'accréditation N° 1-6066

BIOTECHNOLOGY UNIT (Phytocontrol 1)

CHEMICAL ANALYSIS UNIT (Phytocontrol 1)

MICROBIOLOGY UNIT (Phytocontrol 2)



| Pesticio | le re | esid | ues |
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Scope of accreditation No. 1-1904

FLEX3 range

General scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|--|--|---|
| Products of plant origin Animal products Animal feed | Pesticide residues | Extraction: Cold solid-liquid Hydrolysis Purification: SPE Dispersive SPE Analysis: LC/MS-MS, GC/MS-MS, GC-MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|---|---|-------------------------------|
| Products of plant and animal origin: Water-rich products, Oil-rich products, Acidic and water-rich products, Products high in sugar and low in water, Low-fat and low-water products, spices, aromatic and medicinal plants, Alcoholic beverages, Fruit and vegetable juices | Diquat/Paraquat | Preparation/Extraction: Solid / liquid cold extraction Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/20 |
| Non-fatty products of plant origin: Water-rich products Starch-rich products, proteins Acidic products Pigment-rich products | Determination of chlormequat, mepiquat | Extraction: by solvent Analysis: LC-MS-MS | Internal method MOC3/21 |
| Products of plant origin: Water-rich products Starch-rich products, proteins Acidic products Pigment-rich products | Determination of dithiocarbamate residues | Preparation/Extraction: Hydrolysis Analysis: Determination of residual CS2 by GC-MS | Internal method MOC3/01 |
| Water-rich products Acidic and water-rich products Products high in sugar and low in water Low water and low fat products | Determination of dithiocarbamate residues by family: - Dimethyldithiocarbamates - Ethylenebisdithiocarbamates - Propylenebisdithiocarbamates | Extraction Cold solid/liquid Purification: Dispersive SPE Device: LC-MS/MS | Internal method MOC3/401 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|--|----------------------------|
| Products of plant origin: Water-rich products Starch-rich products, proteins Acidic products Pigment-rich products | Multi-residue determination of pesticides Organophosphates: Chlorpyriphos ethyl Isofenphos methyl, Malathion, Parathion methyl, Phosalone, Pirimiphos methyl, Tolclophos methyl, Chlorfenvinphos, chlorpyriphosmethyl, dichlorfenthion, ethoprofos, fenchlorfos, fonofos Organochlorines: Chlorpropham, Procymidone, Propyzamide, Vinchlozoline, Myclobutanil, Triadimefon, Triadimenol, 2-4'DDE, 2-4'DDD, 4-4'DDE, 4-4"DDT, chlorobenzylate, fenarimol, fenhexamide, hcb, hch alpha, hch beta, hch delta, mirex oxadiazon, pentachloroanisole, tebufenpyrad Pyrethroids: Bifenthrin, Cyhalothrin Organotin / miscellaneous: Bromopropylate, Cyprodinil, Diphenylamine, Pirimicarb, Propyconazole, Pyrimethanil, Fludioxonil, O-phenylphenol, Oxadixyl, Benalaxyl, bitertanol, carfentrazone-ethyl, chorthal- dimethyl, cyproconazole, dichlofop- methyl, difenoconazole, flusilasole, mepanipyrim, mepronil, penconazole, perthane, proquinazid, pyriproxyfen, tebuconazole Polychlorinated biphenyls (PCBs): PCB 28, PCB 52, PCB 101, PCB 118, PCB 138, PCB 153, PCB 180. | Extraction: Cold solid/liquid Purification: SPE Analysis: GC/MS-MS | Internal method MOC3/25 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|---|----------------------------|
| Products of plant origin: Oil-rich products Animal products: Dairy products Meat products Fats Fishery products Egg products | Multi-residue determination of pesticides Organophosphates: Chlorfenvinphos, Chlorpyrifos ethyl, Chlorpyrifos methyl, Coumaphos Fenitrothion, Malathion, Methidathion Parathion methyl, Parathion ethyl, Phosalone, Pirimiphos methyl Ethion, Isofenphos methyl Pyridafenthion, Tolclophos methyl Organochlorines: Aclonifen, Chlorpropham, 2,4-DDD 2,4-DDE, 4,4'-DDE, 4,4' DDT, Dieldrin Endosulfan alpha, Endosulfan beta Endosulfan sulphate, HCB, Oxyfluorfen Procymidone, Propyzamide Vinchlozolin, Myclobutanil Carfentrazone ethyl, Cyproconazole Diclofop methyl, Difenoconazole Fenarimol, Penconazole, Tebuconazole Tebufenpyrad Pyrethroids: Bifenthrin, Cyfluthrin, Cyhalothrin Cypermethrin, Deltamethrin Fluvalinate, Tefluthrin, Tetramethrin Organotin / miscellaneous: Bromopropylate, Propyconazole Fludioxonil, Benalaxyl, Cyprodinil Diflufenican, Flusilasole, Mepronil Metalaxyl, Pirimicarb, Proquinazid, Prosulfocarb, Pyriproxifen | Extraction: Cold solid/liquid Purification: Dispersive SPE Analysis: GC-MS/MS | Internal method MOC3/26 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|----------------------------|
| Products of plant origin: Water-rich products Starch-rich products, proteins Acidic products Pigment-rich products Low water and low fat products | Etephon | Extraction: Cold solid/liquid Analysis: LC-MS-MS | Internal method MOC3/27 |
| Products of plant origin: Water-rich products, Acidic and water-rich products, Low water and low fat products High-sugar, low-water products Alcoholic beverages, Fruit and vegetable juices, Baby food | Determination of the content of fentin (expressed as triphenyltin cation), fenbutatin oxide, cyhexatin and azocyclotin. | Extraction: by solvent Purification: Liquid/solid (dispersive SPE) Analysis: LC-MS/MS | Internal method MOC3/31 |
| Products of plant origin : Water-rich products Starch-rich products, proteins Acidic products | Determination of the Maleic Hydrazide | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/44 |
| Products of plant origin: Water-rich products, Acidic and water-rich products, Products high in sugar and low in water, Low water and fat products, Alcoholic beverages, Fruit and vegetable juices, Baby food | Determination of ethylene thiourea (ETU) and propylene thiourea (PTU) content | Extraction: Cold solid/liquid Purification: Liquid/liquid Analysis: LC-MS-MS | Internal method MOC3/45 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|---|----------------------------|
| Products of plant origin: Water-rich products, Acidic and water-rich products, Low water and low fat products High-sugar, low-water products Alcoholic beverages, Fruit and vegetable juices, Sodas | Determination of the 1,4-Dimethylnaphthalene, Acetochlor, Alachlor, Benfluralin, Clomazone, Diflufenican, Ethofumesate, Etofenprox, Fenpropathrin, Fenvalerate, Fluopicolide, Hexazinone, Metolachlor, Permethrin, Piperonyl Butoxide, Pyridaben, Tefluthrin, Terbufos, Terbuthylazine, Triallate, Zoxamide. | Extraction: by solvent Purification: Liquid/solid (dispersive SPE) Analysis: GC-MS/MS | Internal method MOC3/55 |
| Products of plant origin : Baby food | Multi-residue determination of pesticides Terbufos, Fipronil, Fipronil desulfinyl, HCB, Haloxyfop 2ethylhexyl, Haloxyfop methyl, Terbufos sulfone, Heptachlor, Heptachlor epoxide cis, Heptachlor epoxide trans Endrin, Disulfoton, Dieldrin, Aldrin, Demeton S Methyl, Nitrofen | Extraction: Cold solid/liquid Purification: Liquid/Solid (SPE) Analysis: GC-MS/MS | Internal method MOC3/56 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|---|---|-----------------------------|
| Products of plant origin : Baby food | Multi-residue determination of pesticides Haloxyfop (free acid), Terbufos sulfoxide, Ethoprophos, Fensulfothion, Fensulfothion oxon, Fensulfothion oxon sulfone, Fensulfothion sulfone, Disulfoton sulfone, Disulfoton sulfoxide, Cadusafos | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/57 |
| Non-fat products of plant origin: Water-rich products, Acidic and water-rich products, Alcoholic beverages, Oil-rich products (oil seeds) Low water and low fat products Miscellaneous products: teas Animal feed: Fodder, oilcake Compound feed | Determination of the Glyphosate and AMPA | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/80 |
| Products of plant origin: Water-rich products Acidic and water-rich products Alcoholic beverages Fruit and vegetable juices | Determination of Fosethyl- Aluminium and Phosphonic Acid content | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/89 |
| Products of plant origin: Water-rich products Acidic and water-rich products Products high in sugar and low in water Alcoholic beverages Fruit and vegetable juices | Determination of Perchlorate and Chlorate content | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/120 |
| Liquid and powdered wheyLiquid and powdered milk | Determination of Perchlorate and Chlorate content | Solid-liquid extraction Liquid-solid purification (SPE) LC-MS/MS analysis | Internal method MOC3/424 |

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
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| Non-fatty products of plant origin: Water-rich products Acidic and water-rich products High sugar, low water productsLow water, low fat products Alcoholic beverages Fruit and vegetable juices | Determination of polar residue content: AMPA Etherephon Fosethyl-Aluminium Glufosinate Glufosinate-N-acetyl Glyphosate Maleic hydrazide Phosphonic acid Chlorate Perchlorates | Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/414 |
|--|---|--|-----------------------------|
| Bee products: Honey Royal jelly Pollen Bees | Multi-residue determination of pesticides: 2.4 DDD, 2.4 DDE, 4.4 DDE, 4,4 DDT, Alachlor, Bromopropylate, Chlordane (cis+trans), Chlorobenzilate, Chlorpyriphos ethyl, Chlorpyriphos methyl, Cyhalothrin, Cymiazole, Cypermethrin, Deltamethrin, Dichlobenil Dieldrin, Difenoconazole, Endosulfan alpha, Endosulfan beta, Endrin, Ethion, Fenitrothion, Tau- fluvalinate, HCH alpha, HCH beta, Malathion, Metolachlor, Oxadiazon, Oxyfluorfen Parathion methyl, Permethrin, Pirimiphos methyl, Procymidone, Profenofos, Prothiofos, Quinalfos, Tebufenpyrad, Tetradifon, Trifluralin, Vinchlozolin. | Extraction: Cold solid/liquid Purification: Dispersive SPE Analysis: GC-MS/MS | Internal method MOC3/76 |
| Animal products: Meat products Egg products and by- products | Fipronil, Fipronil sulfone | Preparation / Extraction : Cold solid / liquid Purification : SPE Analysis : GC-MS/MS | Internal method MOC3/183 |
| Animal products: Meat products Egg products and by- products. | Amitraz (including metabolites containing the 2,4 dimethylaniline moiety expressed as amitraz) | Preparation / Extraction : Hydrolysis Cold solid / liquid Purification : Dispersive SPE Analysis: LC-MS/MS | Internal method MOC3/184 |
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Original products plant : Water-rich products | Multi-residue determination of pesticides: 6-Benzyladenine, Acephate, Acetamiprid, Ametoctradine, Amidosulfuron, Azaconazole, Azimsulfuron, Azinphos-ethyl, Azinphos-methyl, Azoxystrobin, | Preparation/ Extraction: Cold solid / liquid Purification: SPE | Internal method MOC3/407 |



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| Acidic and water-rich | Beflubutamide, Bensulfuronmethyl, | | |
| products | Benthiavalicarbisopropyl, Bixafen, Boscalid, | Analysis: LC-MS/MS | |
| | Bromacil, Bromuconazole, Bupirimate, | | |
| Products rich in | Buprofezin, Buturon, Cadusafos, Carbendazim, | | |
| sugar and low water content | Carbetamide, Carboxin, Chlorantraniliprole, | | |
| | Chloridazon, Chlorotoluron, Chloroxuron, | | |
| Low-calorie products | Chlorsulfuron, Chromafenozide, Cinidonethyl, | | |
| water and fat | Cinosulfuron, Clethodim-sulfoxide, Clofentezine, | | |
| | Clothianidin, Cyanazine, Cyantraniliprole, | | |
| Alcoholic beverages | Cyazofamid, Cycluron, Cyflufenamid, Cymoxanil, | | |
| | Cyprosulfamide, Demeton-S, | | |
| Fruit juice and | Demeton-S-methylsulfone, | | |
| Vegetables | Demeton-S-methylsulfoxide, Desmetryn, | | |
| 1 0,000.00 | Difenamide, Diflubenzuron, Dimethenamid- P, | | |
| Sodas | Dimethoate, Dimethomorphe, Dinoseb, | | |
| Sodas | Dinoterb, Disulfoton-sulfone, Disulfoton- | | |
| | sulfoxide, Disurotori-surforie, Disuriotori- | | |
| | Emamectin-benzoate B1a, Emamectin-benzoate | | |
| | · · | | |
| | B1b, Epoxiconazole, Ethametsulfuron-methyl, | | |
| | Ethidimuron, Ethiprole, Ethirimol, Etoxazole, | | |
| | Fenamidone, Fenamiphos sulfone, | | |
| | Fenamiphossulfoxide, Fenbuconazole, | | |
| | Fenchlorphos oxon, Fenoxaprop-ethyl, | | |
| | Fenoxycarb, Fenpropidine, Fenpyramazine, | | |
| | Fenpyroximate, Fensulfothion, | | |
| | Fensulfothionoxon, Fensulfothion-oxonsulfone, | | |
| | Fensulfothionsulfone, | | |
| | Fenthion, Fenthion sulfone, Fenthion sulfoxide, | | |
| | Fenuron, Florasulam, Fluazinam, Flufenoxuron, | | |
| | Fluometuron, Fluopyram, | | |
| | Fluoxastrobin, Flupyradifurone, | | |
| | Flupyrsulfuron methyl, Fluquinconazole, | | |
| | Flurtamone, Fluxapyroxad, Foramsulfuron, | | |
| | Forchlorfenuron, Fosthiazate, Fuberidazole, | | |
| | Furametpyr, Halauxifen methyl, Halfenprox, | | |
| | Halosulfuronmethyl, Hexythiazox, | | |
| | Hydramethylnon, Imazalil, Imazamox, Imazaquin, | | |
| | Imazosulfuron, Imidachloprid, Indoxacarb, | | |
| | lodosulfuronmethyl, loxynil, lprovalicarb, | | |
| | | | |
| | Isazofos, Isocarbophos, Isoprocarb, | | |
| | Isoprothiolane, Isoproturon, Isopyrazam, | | |
| | Isoxaben, Isoxaflutole, Isoxathion, Kresoxim- | | |
| | methyl, Lenacil, Linuron, Lufenurone, | | |
| | Mandipropamid, MCPA, Mecarbam, | | |
| | Mesosulfuronmethyl, | | |
| | Metaflumizone, Metamitron, Metconazole | | |
| | | | |
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE | REFERENCE OF |
| | | METHOD | THE METHOD |
| Original products | Methabenzthiazuron, Methomyl, | Preparation/ | |
| plant : | Methoxyfenozide, Metobromuron, Metolcarb, | Extraction: | |
| Water-rich products | Metosulam, Metoxuron, | Cold solid / liquid | Internal method |
| | Metrafenone, Metsulfuronmethyl, | | MOC3/407 |
| Acidic and water-rich | Mevinphos, Monalide, Monocrotophos, | Purification: SPE | |
| products | Monolinuron, Monuron, NAD(1-naphthyl | | |
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| aromatic and medicinal plants | Boscalid, Cyflufenamid Difenamide, Emamectin-benzoate b1a, Fenamidone, Fenpyroximate, Imidachloprid, Iprovalicarb, Isoxathion Linuron, Metconazole, Methoxyfenozide Propaquizafop, Pyraclostrobin Spirodiclofen, Tebufenozide | Preparation/ Extraction: Cold solid / liquid Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/417 |
|--|--|---|-----------------------------|
| | Thionazin, Thiophanatemethyl, Tricyclazole, Trifloxystrobin, Triflumuron, Triflusulfuron-methyl, Triticonazole, Tritosulfuron, Vamidothion, Warfarin Acetamiprid, Ametoctradine Azoxystrobin, Benthiavalicarb-isopropyl, | | |
| | Tebufenozide, Tebutam, Tebuthiuron, Teflubenzuron, Tepraloxydim, Terbumeton, Terbumeton desethyl, Tetraconazole, Thiabendazole, Thiachloprid, thiamethoxam, Thiencarbazone methyl, Thifensulfuron-methyl, Thiobencarb, Thiodicarb, | | |
| | Spirotetramate-keto-hydroxy, Spirotetramate-monohydroxy, Spiroxamine, Sulfosulfuron, TCMTB, | | |
| | Spinetoram A, Spinetoram B, Spinosad A, Spinosad D, Spirodiclofen, Spiromesifen, Spirotetramate, Spirotetramate-enol, Spirotetramate-enolglucoside, | | |
| | Pyraclostrobin, Pyraflufenethyl, Pyrimidifen, Pyriofenone, Pyroquilon, Pyroxsulam, Rimsulfuron, Rotenone, Sedaxane, Silthiofam, Simazine, | | |
| Sodas | Propaquizafop, Propoxur, Prothioconazoledesthio, Pyraclofos, | | |
| Fruit juice and Vegetables | Picolinafen, Picoxystrobin, Pinoxadene, Pirimicarbdesmethyl, Promecarb, Prometon, Propamocarb, Propaphos, | | |
| water and fat Alcoholic beverages | Penoxsulam, Penthiopyrad, Phenmedipham, Phorate sulfone, Phorate-oxon, Phosphamidon, Phoxim, | | |
| Low-calorie products | Oxasulfuron, Paclobutrazol, Paraoxon-ethyl, Pencycuron, Penflufen, | | |
| Products rich in sugar and low water content | acetamide), Napropamide, Neburon, Nicosulfuron, Norflurazon, Novaluron, Ofurace, Omethoate, Orthosulfamuron, Oxamyl, | Analysis: LC-MS/MS | |



| | | Analysis: LC-MS/MS | |
|--|---|--|-----------------------------|
| Products of plant origin Water-rich products Acidic and water-rich products Products high in sugar and low in water Low water and low fat products Fruit and vegetable juices Alcoholic beverages Sodas | 2,4-D 2,4,5-T Diclofop Fluazifop Haloxyfop MCPA MCPB Quizalofop | Extraction: Solvent Hydrolysis: Base Analysis: LC-MS/MS | Internal method MOC3/416 |
| Water-rich products Oil-rich products Acidic and water-rich products Products high in sugar and low in water Aromatic and medicinal plants | Matrine | Extraction : Cold solid/liquid Purification : SPE Analysis : LC-MS/MS | Internal method MOC3/421 |
| Products of plant origin: Oil-rich products Products high in sugar and low in water Low water and low fat products Spices Aromatic and medicinal plants Plant extracts Animal products: High-fat dairy products | Ethylene oxide (sum of ethylene oxide and 2-chloroethanol expressed as ethylene oxide) | Extraction: Cold solid / liquid Hydrolysis Purification: Dispersive SPE Analysis: GC-MS/MS | Internal method MOC3/428 |



FLEX3 range

General scope

| Chemical and biological products/ Bio- active products/ Physico-chemical analysis | | Physico-chemical m | ethods: medicinal and aromatic plants |
|---|---------------------------------------|--------------------|---|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | | PRINCIPLE OF THE METHOD |
| Citrus essential oils | Pesticide residues | | Extraction: Liquid / cold liquid Analysis: LC-HRMS |

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Detailed scope

| Chemical and biological products/ Bio- |
|--|
| active products/ Physico-chemical analysis |

Physico-chemical methods: medicinal and aromatic plants

| SUBJECT | CHARACTERISTIC MEASURED OR | PRINCIPLE OF THE | REFERENCE OF |
|-----------------------|--|--|-----------------------------|
| | RESEARCHED | METHOD | THE METHOD |
| Orange essential oils | Acephate, Ametryn, Atrazine-desethyl, Carboxin, Chloridazone, Cinosulfuron Clodinafop-propargyl, Coumaphos Demeton-S-methylsulfone, Desmetryn, Dichlorobenzamide, Dimethoate Diphenamid, Disulfoton-sulfoxid, Ditalimfos, Edifenphos, Ethametsulfuron-methyl Etrimfos, Fenamiphos sulfoxide, Fensulfothion, Fenthion-sulfon, Fenthion-sulfoxide, Flurtamone, Fosthiazate Heptenophos, Imazamox, Iprobenfos, Isocarbophos | Preparation/ Extraction : Liquid / cold liquid Analysis: LC-HRMS | Internal method MOC3/408 |



| | Malaoxon, Metalaxyl, Norflurazon, Omethoate, Paraoxon, Phorate-oxon-sulfoxide, Phorate-sulfoxide Phosphamidon, Profenophos, Propachlor, Pyriofenone, Pyroxsulam, Quinmerac, Sulfotep, Sulfoxaflor Thiacloprid, Thifensulfuron-methyl, Thiodicarb, Vamidothion Zoxamide | | |
|--------------------------------------|--|--|-----------------------------|
| Bergamot and Lemon essential oils | Acephate, Aldicarb, Atrazine-desethyl Bispyribac, BTS 44595 Chlorfenvinphos (E-Z), Chloridazone Cinosulfuron, Dichlorobenzamide Dimethoate, Diphenamid Ditalimfos, Epoxiconazole Ethametsulfuron-methyl Ethidimuron, Ethiofencarb-sulfone Fensulfothion oxon, Fensulfothion Fenthion-sulfoxide, Fenuron Flutolanil, Isazophos, Isocarbophos Mecarbam, Napropamide Omethoate, Phosmet, Sulfoxaflor Thiacloprid, Thiamethoxam Tricyclazole, Zoxamide | Preparation/ Extraction : Liquid / cold liquid Analysis: LC-HRMS | Internal method MOC3/408 |



FLEX3 range

General scope

| Chemical and biological products / Cosmetics and hygiene products / Physico-chemical analysis | | Physico-chemical m | ethods |
|---|--|------------------------|--|
| SUBJECT | | C MEASURED OR RCHED | PRINCIPLE OF THE METHOD |
| Finished cosmetic products and cosmetic raw materials | Determination of th chemical substance allergies | | Extraction: Cold liquid/liquid Cold solid/liquid Purification: SPE Analysis: GC-MS/MS LC-MS/MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

| Chemical and biological products / |
|---|
| Cosmetics and hygiene products / Physico- |
| chemical analysis |

Physico-chemical methods

| chemical analysis | | | |
|---|--|---|--------------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Finished cosmetic products and cosmetic raw materials excluding perfume base (washing gel, shampoo, soap, deodorant, hair dye, talc, glycerine, glycol, moisturising milk, liniment, cream, foundation, micellar water) | Allergen testing: Citral, Geraniol, Cinnamal (Cinnamaldehyde), Hydroxycitronellal, Anise alcohol (4- methoxybenzyl alcohol), Atranol, Chloratranol | Extraction: Cold liquid/liquid Cold solid/liquid Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/127 |
| Finished cosmetic products and cosmetic raw materials excluding perfume base | Allergen testing: Limonene, Benzyl alcohol, Methyl 2- octynoate, Citronellol, | Extraction : Cold liquid/liquid Cold solid/liquid | Internal method MOC3/128 |



(washing gel, shampoo, soap, deodorant, hair dye, talc, glycerine, glycol, moisturising milk, liniment, cream, foundation, micellar water) Anise alcohol (4-methoxybenzyl alcohol), Cinnamyl alcohol, Eugenol, Isoeugenol, Coumarin, α-Isomethyl ionone, Butylphenyl methylpropional (Lilial), Amyl cinnamal (α-mylcinnamaldehyde), Hydroxyisohexyl 3-cyclohexene carboxaldehyde (Lyral), Hexyl cinnamal (α-Hexylcinnamaldehyde), Benzyl benzoate (Benzyl benzoate), Amylcinnamyl alcohol

(alpha-amylcinnamyl alcohol)

Purification:

SPE

Analysis: GC-MS/MS



FLEX3 range

General scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|---|--|--|
| Products of plant origin Animal products | Organic contaminant residues | Cold solids/liquid extraction Cold liquid/liquid Solid/liquid hot |
| Animal feed | | Analysis: UFLC, LC-MS/MS, GC-MS/MS Isotope dilution, LC-GC-FID |

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Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|---------------------------------------|--|-----------------------------|
| Products of plant origin: Water-rich products, Acidic and water-rich products, Alcoholic beverages, Products high in sugar and low in water, Water-poor products and fat, Fruit and vegetable juices, Sodas Animal products: Dairy products Meat products Fishery products | Determination of DDAC and LAC content | Preparation/ Extraction : Cold solid / liquid Analysis: LC-MS-MS | Internal method MOC3/145 |



Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|--|-----------------------------|
| Products of plant origin: Products rich in oil Products low in water and fat (cereals and derived products, fruit and vegetable powders) Fruit and vegetable juices Alcoholic beverages High sugar, low water content products Animal feed: Flour of animal origin Compound feed Raw materials of plant origin Animal products: Dairy products including baby food Egg products Meat products Fishery products | Melamine | Extraction: Solvent Analysis: LC-MS/MS | Internal method MOC3/134 |

FIXED range



Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|--|----------------------------|
| Products of plant origin: Water-rich products (Water content ≥ 60%) Oil-rich products Acidic and water-rich products Products rich in sugar and low water content Miscellaneous products Alcoholic beverages Fruit and vegetable juices Sodas Animal products: Dairy products | Determination of the content into nitrate, nitrite, chloride, bromide | Preparation / Extraction: Water Analysis: HPLC/CI (conductimetry) | Internal method MOC3/02 |

<u>Fixed scope:</u> The laboratory is recognised as competent to perform the tests in strict accordance with the methods mentioned in the scope of accreditation. Technical modifications of the procedure are not allowed.



Heavy metals

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| #Food / Various foods / Physico-chemical analysis | | Analysis of trace elements and minerals and their chemical species in food and feed - LAB GTA 45 | |
|---|--|--|---|
| SUBJECT | | C MEASURED OR RCHED | PRINCIPLE OF THE METHOD |
| Food and feed (including baby food) | | etals erals | Mineralization Wet process by microwave under pressure Open system wet track Analysis: ICP/MS LC-ICP/MS IC-ICP/MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

#Food / Various foods / Physico-chemical analysis

Analysis of trace elements and minerals and their chemica species in food and feed - LAB GTA 45

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|---|-----------------------------|
| All foodstuffs of animal or vegetable origin including baby food | Arsenic, Lead, Cadmium, Mercury, Antimony, Barium, Boron, Chromium, Cobalt, Copper, Tin, Manganese, Molybdenum, Nickel, Palladium, Platinium, Iridium, Lithium, Rhodium, Ruthenium, Thallium, Vanadium | Mineralization: Wet process (microwave digestion in a closed system) Wet route (open system digestion) Analysis: ICP-MS | Internal method MOC3/85 |
| Dairy products including baby food | Aluminium | Mineralization: Wet process (microwave digestion in a closed system) Wet route (open system acid digestion) Analysis: ICP-MS | Internal method MOC3/85 |
| Alcoholic beverages | Iron | Mineralization: Wet route (open system acid digestion) Analysis: ICP-MS | Internal method MOC3/85 |
| Cereals Fruit and vegetables Fruit and vegetable juices Medicinal plants Products of the Honeybee Fishery products Dairy products including baby food | Arsenic III, Arsenic V, monomethyl Arsenic, dimethyl Arsenic, Arsenocholine AsC, Arsenobetaine AsB | Mineralization: Wet route (open system acid digestion) Analysis: LC-ICP/MS | Internal method MOC3/94 |
| Cereal Products Fruit and vegetables Non-alcoholic beverages Sweetened and sugared products Fishery products Dairy products Spices and condiments, Aromatic and medicinal plants | Arsenic III, Arsenic V, monomethyl Arsenic, dimethyl Arsenic, Arsenocholine AsC, Arsenobetaine AsB | Mineralization: Wet route (open system acid digestion) Analysis: IC-ICP/MS | Internal method MOC3/434 |
| Fishery products Fruit and vegetables Mushrooms | Mercury II HgII, Methylmercury MeHg | Mineralization : Wet route (open system acid digestion) | Internal method MOC3/144 |



| Medicinal plants Food supplements Animal feed Food for human consumption: Cereal products, | | Analysis: LC/ICP-MS | |
|--|--|---|--------------------------------|
| Egg products, Dairy products, Meat products, Fishery products, Fruit and vegetables, Sweetened and sugared products, Non-alcoholic beverages, alcoholic beverages, Spices and condiments Aromatic and medicinal plants, Dietary and special foods, Compound foods, Baby food Animal feed: Raw materials, Complete or complementary compound feeds | Calcium, Magnesium, Phosphorus, Potassium | Mineralization: Wet route (open system digestion) Analysis: ICP-MS | Method Internal MOC3/152 |



| Mycotoxins | Scope of accreditation No. 1-1904 |
|------------|-----------------------------------|
|------------|-----------------------------------|

FLEX 3 range

General scope

| Agri-Food / Other foodstuffs/ Physico- chemical analysis | | Determination of mycotoxins and phycotoxins in food and feed - LAB GTA 21/99-1 | |
|---|--------------------|--|---|
| SUBJECT | 0 | C MEASURED OR RCHED | PRINCIPLE OF THE METHOD |
| Products of plant and animal origin Raw material, derived and/or processed products | Determination of m | nycotoxins | Extraction: by solvent Purification: Immunoaffinity SPE Analysis: UFLC/LC-MS/MS |

Flexible scope FLEX3: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Other foodstuffs/ Physico-chemical analysis

Determination of mycotoxins and phycotoxins in food and feed - LAR GTA 21/99-1

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|----------------------------|
| Cereals Oilseeds Nuts Dried fruit Pulses Cereal products Oilseed and nut products Fruit products: Compotes, Juices Alcoholic beverages Coffee/Cocoa Coffee/Cocoa products Food and drink for children Spices Animal feed | Determination of ochratoxin A content | Extraction: by solvent Purification: Immunoaffinity Analysis: LC-FLUO | Internal method MOC3/65 |
| Fresh fruit and fruit products including children's food (fruit-based baby food) | Determination of patulin content | Extraction/purification: Solvent/SPE Analysis: LC-MS-MS | Internal method MOC3/37 |
| Cereals Oilseeds Nuts Dried fruit Pulses Cereal products Oilseed and nut products Fruit products: Compotes (including baby food) Food for children Spices Animal feed | Determination of aflatoxin content (B1, B2, G1, G2) | Extraction: by solvent Purification: Immunoaffinity Analysis: LC-FLUO with post-column derivation | Internal method MOC3/71 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|---|--|--------------------------------|
| Cereals Cereal products Fresh fruit Fruit products Infant food Animal feed: Oilseed products: Oilseed cake | Determination of the: Deoxynivalenol (DON), Fumonisins (B1+B2, B3), HT2 toxin, T2 toxin, Zearalenone (ZEA), Aflatoxins (B1, B2, G1, G2), Ochratoxin A (OTA) | Extraction / purification: Solvent / SPE Purification: Immunoaffinity Analysis: UFLC | Internal method MOC3/107 |
| Spices Dry plants Coffee and cocoa products | Determination of aflatoxin (G2, G1, B2, B1) and ochratoxin content | Extraction: by solvent Purification: Immunoaffinity Analysis: LC-MS-MS | Internal method MOC3/108 |
| Milk and all milk products including infant food Dairy products containing cereals | Determination of Aflatoxin M1 content | Extraction: by solvent Purification: Immunoaffinity Analysis: UFLC | Internal method MOC3/110 |
| Cereals | Determination of deoxynivalenol (DON) content | Extraction: by solvent Purification: Immunoaffinity Analysis: UFLC | Internal method MOC3/78 |
| Cereals, Cereal products Pulses (dried vegetables) Fresh vegetables, Leafy vegetables, Animal feed, Oil cakes | Determination of the content in Datura alkaloids (atropine and scopolamine) | Extraction: By solvent Purification: SPE Analysis: LC-MS-MS | Internal method MOC3/121 |
| Cereals Cereal products Pulses (dried vegetables) Fresh vegetables Animal feed Oilseed cake Baby food | Determination of ergot alkaloid content (Ergocristine / Ergocristinine, Ergotamine / Ergotaminine, Ergocryptine / Ergocryptinine, Ergometrine / Ergometrinine, Ergosin / Ergosinine, Ergocornine / Ergocorninine) | Extraction: by solvent Purification: SPE Analysis: UFLC | Internal method MOC3/122 |
| Cereals | Determination of the content of zearalenone (ZEA) | Extraction: by solvent Purification: SPE Analysis: UFLC | Internal method MOC3/60 |
| Cereals Cereal products Fresh fruit Dried fruit Nuts | Determination of the tenuazonic acid content Alternariol Alternariol methyl ether | Extraction Cold solid/liquid Purification d-SPE | Internal method MOC3/447 |



| Fruit products | | |
|--------------------------|----------|--|
| Baby food | Analysis | |
| Oilseeds | LC-MS/MS | |
| Oilseed and nut products | | |
| Spices | | |
| Animal feed | | |
| | | |



Alkaloids

Scope of accreditation No. 1-1904

FLEX3 range

General scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|--|--|---|
| Products of plant origin Animal products Animal feed | Organic contaminant residues | Extraction: Cold solid/liquid Cold liquid/liquid Solid/liquid hot Purification: Liquid-Solid (SPE) Analysis: UFLC, LC-MS/MS, GC-MS/MS Isotope dilution, LC-GC-FID |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---------|--|--|----------------------------|
| Spices | Piperine | Preparation/Extraction: Cold solid/liquid Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/51 |
| Potato | Chaconine and solanine | Preparation/Extraction: Cold solid/liquid Analysis: LC-MS/MS | Internal method MOC3/50 |



General scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Determination of mycotoxins and phycotoxins in food and feed - LAB GTA 21/99-1

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|---|--|---|
| Products of plant and animal origin Raw material, derived and/or processed products | Determination of mycotoxins | Extraction: by solvent Purification: Immunoaffinity SPE Analysis: UFLC/LC-MS/MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Determination of mycotoxins and phycotoxins in food and feed - LAB GTA 21/99-1

| SUBJECT | CHARACTERISTIC MEASURED OR | PRINCIPLE OF THE | REFERENCE OF |
|--|--|---|-----------------------------|
| | RESEARCHED | METHOD | THE METHOD |
| Products of plant and animal origin: Leafy vegetables Cereals and cereal products Aromatic and medicinal plants Food supplements SpicesHoney | Echimidine, Echimidine-N-oxide, (Z)-Erucifoline, (Z)-Erucifoline-N-oxide, Europine hydrochloride, Europine-N-oxide, Heliotrine, Heliotrine-N-oxide, (Indicine hydrochloride+ Lycopsamine) (Indicine-N-oxide+Intermedine-N-oxide) Integerrimine, Integerrimine-N-oxide, Jacobine, Jacobine-N-oxide, Lasiocarpine, Lasiocarpine-N-oxide, Lycopsamine-N-oxide, Monocrotaline, Monocrotaline-N-oxide, Retrorsine, Retrorsine-N-oxide, Senecionine, Senecionine-N-oxide, Senkirkine, Seneciphylline, Seneciphylline-N-oxide, Senecivernine, Senecivernine-N-oxide, Trichodesmine, Intermedine | Preparation/Extraction: By solvent Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/123 |



GMO

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Including / Plants / Molecular genetics | Analyses related to | genetically modified organisms - GMOs | |
|--|---|--|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | |
| Raw materials Processed products Cereal products Sweetened and sugared products Animal feed | Maize Target PCR plant species PCR target of a GMO sequence: - screening sequence - specific event sequence | Homogenisation / Grinding Extraction Real-time PCR Qualitative and quantitative testing | |
| Raw materials Processed products Cereal products Sweetened and sugared products Animal feed | Soya Target PCR plant species PCR target of a GMO sequence: - screening sequence - specific event sequence | Homogenisation / Grinding Extraction Real-time PCR Qualitative and quantitative testing | |
| Raw materials (seeds, grains, flour, etc.) Processed products Cereal products Sweetened and sugared products Animal feed | Rape Target PCR plant species PCR target of a GMO sequence: - screening sequence - specific event sequence | Homogenisation / Grinding Extraction Real-time PCR Qualitative and quantitative testing | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Including / Plants / Molecular genetics

Analyses related to genetically modified organisms -

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | FIELD OF APPLICATION | MEASURE MENT RANGE | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|------------------------|---|---|--------------------------------------|---|---|
| Plant species Maize | Plant species specific PCR target: ADH | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real- time PCR qualitative/quantitati ve | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on MON 810, GA21, NK 603 and MON 863 maize MOC3/103 |
| Plant species Maize | GMO sequence- specific PCR target P35S screening | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real- time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on MON 810, NK 603 and MON 863 |
| Plant species Maize | GMO sequence- specific PCR target Tnos screening | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real- time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on maize, GA21, NK 603 and MON 863 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | FIELD OF APPLICATION | MEASURE MENT RANGE | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|------------------------|--|---|--------------------------------------|--|---|
| Plant species Maize | GMO sequence- specific PCR target Event specific identification MON810 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real- time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on MON 810 maize |
| Plant species Maize | PCR target GMO sequence specific Event specific identification MON863 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real- time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on MON 863 maize MOC3/103 |
| Plant species Maize | GMO sequence specific PCR target Event specific identification NK603 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on NK603 maize |
| Plant species Maize | GMO sequence- specific PCR target Event specific identification GA21 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on GA21 maize MOC3/103 |



| Plant species Maize | GMO sequence- specific PCR target Event specific identification Bt11 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on Bt11 maize MOC3/103 |
|------------------------|---|---|--------------------------------------|---|---|
| Plant species Maize | GMO sequence- specific PCR target Specific event identification Mon88017 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on Mon88017 maize MOC3/103 |
| Plant species Maize | GMO sequence- specific PCR target Event specific identification T25 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from the standards Validation according to NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on T25 corn MOC3/103 |
| Plant species Maize | GMO sequence- specific PCR target Event specific identification TC1507 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on maize TC1507 MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: DAS-40278-9 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |



| Species plant Maize | GMO sequence specific PCR target Event specific identification: DAS-59122-7 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
|------------------------|---|---|-------------|---|---|
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MIR162 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MIR604 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: My89034 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: VCO-01981-5 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |



| Species plant Maize | GMO sequence specific PCR target Event specific identification: Mon87427 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
|------------------------|---|---|-------------|---|---|
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MON87403 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MON87460 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MON87411 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: DP-4114-3 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |



| | | products, Animal feed | | | |
|------------------------|---|---|-------------|---|---|
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MZHG0JG | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: 5307 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species plant Maize | GMO sequence specific PCR target Event specific identification: MZIR098 | Raw maize products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | FIELD OF APPLICATION | MEASURE MENT RANGE | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|-----------------------|---|---|--------------------------------------|---|---|
| Plant species Soya | Plant species specific PCR target: Lectin | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybeans RRS, RRS2 MOC3/103 |
| Plant species Soya | GMO sequence- specific PCR target P35S screening | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybean RRS MOC3/103 |
| Plant species Soya | GMO sequence- specific PCR target Tnos screening | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybean RRS MOC3/103 |
| Plant species Soya | GMO sequence specific PCR target Event specific identification RRS | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybean RRS MOC3/103 |
| Plant species Soya | GMO sequence- specific PCR target Event specific identification RRS2 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybean RRS2 |



| | | sugared products, Animal feed | | | MOC3/103 |
|-----------------------|---|---|--------------------------------------|---|--|
| Plant species Soya | GMO sequence- specific PCR target Event specific identification FG72 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / quantitativ e | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybeans FG72 MOC3/103 |
| Plant species Soya | GMO sequence- specific PCR target Specific event identification Mon87701 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on Mon87701 soybeans MOC3/103 |
| Plant species Soya | GMO sequence- specific PCR target Event specific identification A2704- 12 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/ crushing Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from standards NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments on soybean A2704-12 MOC3/103 |



| | CHARACTERISTIC | Animal feed | MEASURE | | |
|---------------------------|--|---|-------------|---|---|
| Species Vegetable Soya | GMO sequence specific PCR target Event specific identification SYHTØH2 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species | GMO sequence specific PCR target Event specific identification DAS-44406-6 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species Vegetable Soya | GMO sequence specific PCR target Event specific identification DAS-68416-4 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Species Vegetable Soya | GMO sequence specific PCR target Event specific identification MON87751 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |
| Plant species Soya | GMO sequence specific PCR target Event specific identification DAS-81419 | Raw soybean products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method adapted from NF EN ISO 21569, 24276, 21570 and 21571 and their respective amendments MOC3/103 |



| | | Raw rapeseed | | | |
|-----------------------|--|--|--------------------------------------|---|-----------------------------|
| Plant species Rape | Rape Plant species specific PCR target: CRUA | products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative / Quantitati ve | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape P35S screening | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape TNOS screening | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification: 73496 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : MON88302 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |



| | | products, Animal feed | | | |
|-----------------------|---|--|-------------|---|-----------------------------|
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : MS1 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : MS8 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : RF1 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : RF3 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |



| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : RT/GT73 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
|-----------------------|--|--|-------------|---|-----------------------------|
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : T45 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : TOPAS 19-2 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : RF2 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared products, Animal feed | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |
| Plant species Rape | Rape GMO sequence- specific PCR target Event specific identification : Oxy-235 | Raw rapeseed products (seeds, grains, flour) Processed products Cereal products, Sweetened and sugared | Qualitative | Homogenisation/grin ding Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR | Internal method MOC3/103 |



| | products, Animal feed | | |
|--|--------------------------|--|--|
| | | | |
| | | | |



Allergens

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Food / Allergens / Molecular genetics | | | | |
|---|---|--|--|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | | |
| Cereal products Fruit and vegetables Sweetened and sugared products Coffee, Tea and Infusions Dairy products Fatty products Meat products Alcoholic and non-alcoholic beverages Spices Compound Foods | Detection of target DNA sequence of a plant or animal species (species identification or allergy-prone) Simplex or duplex detection | Grinding / Homogenisation Manual DNA extraction by silica column adsorption Semi-automated DNA extraction with magnetic beads Real-time PCR amplification | | |
| Baby food Dietetic products | | (qualitative method) | | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Food / Allergens / Molecular genetics

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|--|
| Raw cereal products Processed cereal products Fruit and vegetables Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Spices Compound feed Baby food Dietetic products Sweetened and sugared products | Specific target DNA sequence of <u>:</u> cashew nut: Ana o3 2S albumin | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fruit and vegetables Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Spices Compound feed Baby food Dietetic products Sweetened and sugared products | Specific target DNA sequence of <u>:</u> the nut : Vicilin-like seed storage protein | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fruit and vegetables Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion | Specific target DNA sequence of <u>:</u> hazelnut : Cor a 1 | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) |



| Spices: turmeric and paprika Compound feed Baby food Dietetic products Sweetened and sugared products | | | Real-time PCR amplification |
|---|---|---|--|
| Raw cereal products Processed cereal products Fruit and vegetables Fatty products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Sweetened and sugared products | Specific target DNA sequence of <u>:</u> almond : prunin 1 precursor | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fatty products: sunflower oil and butter Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion: tea and jasmine flower Sweetened and sugared products | Specific target DNA sequence of <u>:</u> peanut : Arah 1 gene | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fatty products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Sweetened products: cake and cake mix | Specific target DNA sequence of <u>:</u> sesame: 2S albumin | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |



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|--|---|---|--|
| Raw cereal products Processed cereal products Fruit and vegetables Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Spices Compound feed Baby food Dietetic products Sweetened and sugared products | Specific target DNA sequence of <u>:</u> pecan : Vicilin-like seed storage protein | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Compound feed Baby food Dietetic products Sweetened and sugared products | Specific target DNA sequence of <u>:</u> soybean: lectin | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fatty products Alcoholic beverages Coffee, tea, infusion Baby food Sweetened and sugared products | Specific target DNA sequence of <u>:</u> lupin : conglutin alpha mRNA | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fruit and vegetables Dairy products Fatty products Alcoholic beverages: beer and brandy Non-alcoholic beverages Spices | Specific target DNA sequence of <u>:</u> celery : ribosomal RNA | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |



| Compound feed Baby food Sweetened and sugared products | | | |
|--|--|---|--|
| Raw cereal products Processed cereal products Fruit and vegetables Fatty products Alcoholic beverages Non-alcoholic beverages Coffee, tea, infusion Compound feed Baby food Sweetened and sugared products | Specific target DNA sequence of <u>:</u> Brazil nuts : 2S albumin (ber e1) | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw grain products: soybeans and barley Processed cereal products Fruit and vegetables Sweetened and sugared products | Specific target DNA sequence of <u>:</u> the pistachio : COR gene dehydrin | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed cereal products Fruit and vegetables Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, Tea, Infusion Spices Compound feed Baby food Dietetic products Sweetened products: chocolate powder | Specific target DNA sequence of <u>:</u> Macadamia nut : vicillin precursor | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification (qualitative method) | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |



| Raw cereal products Processed Cereal Products Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, herbal tea Spices Compound foods Infant food Dietetic products | Mustard-specific target DNA sequence: MADS D (white mustard) and reverse transcriptase from gypsy-like retroelement (yellow/black mustard) | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time duplex PCR amplification qualitative method | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
|---|--|---|--|
| Raw cereal products Processed Cereal Products Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, herbal tea Spices Compound foods Infant food Dietetic products | White mustard specific target DNA sequence: MADS D | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time duplex PCR amplification qualitative method | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw cereal products Processed Cereal Products Dairy products Fatty products Meat products Alcoholic beverages Non-alcoholic beverages Coffee, tea, herbal tea Spices Compound foods Infant food Dietetic products | Yellow/black mustard specific target DNA sequence: reverse transcriptase from gypsy-like retroelement | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time duplex PCR amplification qualitative method | Internal method: MOC3/115 Grinding / Homogenisation DNA extraction: NucleoSpin®Plant II or NucleoMagPLant II (Macherey-Nagel) Real-time PCR amplification |
| Raw grain products Alcoholic beverages Compound feed | Mollusc-specific target DNA sequence not specified by the PCR kit supplier | Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Amplification by real-time PCR real time qualitative method | Internal method MOC3/115: Milling / Homogenisation DNA extraction: NucleoSpin®Plant I or NucleoMag®Plant II (Macherey-Nagel) Real time PCR amplification |



Raw Cereal Products Processed grain products Alcoholic beverages Non-alcoholic beverages Compound foods

Fish-specific target DNA sequence: 18S RNA

Milling / Homogenisation Manual DNA extraction by silica column adsorption or semi-automated DNA extraction by magnetic beads Real-time PCR amplification qualitative method Internal method
MOC3/115:
Grinding /
Homogenisation:
IC3/01-01.D
DNA extraction:
NucleoSpin®Plant II
or NucleoMag®Plant
II
(Macherey-Nagel)
Real time PCR
amplification



FLEX3 range

General scope

| Food / Allergens / Immunology | | | |
|--|---|---|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | |
| Cereal products Alcoholic and non-alcoholic beverages Compound feed Meat products | | | |
| Fishery products Sweet products Dairy products Spices and herbs | Detection and quantification of allergenic proteins | Grinding / Homogenisation Protein extraction ELISA | |
| Baby food Dietary food, diet and special food Dried fruit | | | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Food / Allergens / Immunology

| SUBJECT | CHARACTERISTIC MEASURED OR | PRINCIPLE OF THE METHOD | REFERENCE OF THE |
|---|--|---|--|
| SUBJECT | RESEARCHED | PRINCIPLE OF THE WIETHOD | METHOD |
| Cereal products: Breakfast cereals Raw cereals and primary products wheat, rye, barley, oats, spelt and their hybrid strains, rice, sorghum, quinoa, lentils, chickpeas, flour and derivatives, cereal flakes, tapioca, buckwheat, brewer's yeast, guar gum. Compound feeds: Baking mix Preparations for sauces Pizzas Breadcrumbs Cereal and vegetable purée, ravioli Spices and herbs Dietary food, diet and special food: Soy-based dairy substitutes | Detection and quantification of gluten | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/119 according to supplier kit : R7001 RIDASCREEN® Gliadin (R. BIOPHARM) |
| Diet and special food: yeast and maltodextrin Compound food: preparation for sauces (rehydration powders) Cereal products: starches Alcoholic beverages: beer, wine Dairy products: cheese | Detection and quantification of gluten | Milling/Homogenisation Protein extraction ELISA | Internal method MOC3/149 Supplier kit: R7021 RIDASCREEN® Gliadin Competitive (R. BIOPHARM) |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|--|---|
| Fishery products: Fresh and canned fish Alcoholic beverages: Wine | Detection of histamine | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/135 according to supplier kit: R1601 RIDASCREEN® Histamin (R. BIOPHARM) |
| Non-alcoholic beverages: Almond milk Soy milk Fruit juice Cereal products: Raw cereals and primary products Puffed cereals Cereal products containing chocolate Sweet products: Sorbets & water ice Compound feed Cereal and vegetable dishes Babyfood with cereals and vegetables Dietary food, diet and special food: Soy-based dairy substitutes | Detection and quantification of casein | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/125 according to supplier kit: R4612 RIDASCREEN®FAST Casein (R. BIOPHARM) |
| Cereal products: Raw cereals and primary products Puffed cereals Compound feeds: Babyfood Chile Bolognese sauce Soup Meat products: Chorizo- Pork chop ham Dairy products Cheese Drinks Wine | Detection and quantification of egg protein | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/125 according to supplier kit: R6402 RIDASCREEN®FAST Ei/Egg Protein (R. BIOPHARM) |



| Cereal products (raw and primary processing) Alcoholic and non-alcoholic beverages Processed cereal products Compound feed Dietary food, diet and special food: Soy-based dairy substitutes | Detection and quantification of total milk protein | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/125 according to supplier kit R4652 RIDASCREEN FAST Milk (R BIOPHARM) |
|--|--|---|--|
| Cereal products (raw and primary processing): Maize flour, Soya, Quinoa, Wheat semolina Processed cereal products: Mini plum, Dry pastry mix, Cookies, Bread, Compound foods: Chili con carne, Bolognese sauce, Mediterranean pizza, Doy passato BBF; Sweet products: Organic candy, Hazelnut ice cream, Glucose syrup, Chocolate Dietary food, diet and special food: Soy-based dairy substitutes | Detection and quantification of Beta- lactoglobulin | Grinding/Homogenisation Protein extraction ELISA | Internal method MOC3/190 according to supplier kit R4912 RIDASCREEN® F AST β-Lactoglobulin (R. BIOPHARM) |
| Cereal products (raw and primary processing) Processed cereal products Compound foods Baby food Meat products Soft drinks | Detection and quantification of soybeans | Milling / Homogenisation Protein extraction ELISA | Internal method MOC3/197 Supplier kit: R7102 RIDASCREEN®FAST Soya (R. BIOPHARM) |



| Dietary foods Baby food Compound feed | Detection and quantification of tropomyosin | Milling / Homogenisation Protein extraction ELISA | Internal method MOC3/125 Supplier kit: R7312 RIDASCREEN®FAST Crustacean (R. BIOPHARM) |
|--|---|--|---|
| Cereal products Cornflour, Soya, Quinoa, Wheat semolina, Pastry mix, Mini plum, Cookies, Madeleine Sweet products Jam, Tagada candy, Glucose syrup, Honey Dairy products Plain yoghurt, Tesco Vanilla, Fresh goat cheese Spices and herbs Mustard seed, Nutmeg, Pepper, Garlic Dried fruit Dietary food, diet and special food: Soy yoghurt | Detection and quantification of hazelnut | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/192 Supplier kit : R6802 RIDASCREEN Fast Hazelnut (R- BIOPHARM) |
| Cereal products Cornflour, Soya, Quinoa, Wheat semolina, Pastry mix, Mini plum, Cookies, Madeleine Sweet products Jam, Tagada candy, Glucose syrup, Honey Dairy products Plain yoghurt, Tesco Vanilla, Fresh goat cheese Spices and herbs Mustard seed, Nutmeg, Pepper, Garlic | Detection and quantification of the kernel | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/191 Supplier kit : R6901 RIDASCREEN Fast Mandel / Almond (R- BIOPHARM) |



| Dried fruit | | | |
|--|--|--|--|
| Dietary food, diet and special food: Soy yoghurt | | | |
| Cereal products Cornflour, Soya, Quinoa, Wheat semolina, Pastry mix, Mini plum, Cookies, Madeleine Sweet products Jam, Tagada candy, Glucose syrup, Honey Dairy products Plain yoghurt, Tesco Vanilla, Fresh goat cheese Spices and herbs Mustard seed, Nutmeg, Pepper, Garlic Dried fruit Dietary food, diet and special food: Soy yoghurt | Detection and quantification of the nut | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/193 Supplier kit : Walnut WAL-E01 (LIBIOS, Immunolab) |
| Cereal products Cornflour, Soya, Quinoa, Wheat semolina, Pastry mix, Mini plum, Cookies, Madeleine Sweet products Jam, Tagada candy, Glucose syrup, Honey Dairy products Plain yoghurt, Tesco Vanilla, Fresh goat cheese Spices and herbs Mustard seed, Nutmeg, Pepper, Garlic | Detection and quantification of macadamia nuts | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/194 Supplier kit : Macadamia Nut MAC-E01 (LIBIOS, Immunolab) |



| Dried fruit | | | |
|--|---|---|---|
| Dietary food, diet and special food: Soy yoghurt | | | |
| Cereal products Cornflour, Soya, Quinoa, Wheat semolina, Pastry mix, Mini plum, Cookies, Madeleine Sweet products Jam, Tagada candy, Glucose syrup, Honey Dairy products Plain yoghurt, Tesco Vanilla, Fresh goat cheese Spices and herbs Mustard seed, Nutmeg, Pepper, Garlic Dried fruit Dietary food, diet and special food: Soy yoghurt | Detection and quantification of pistachio | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/195 Supplier kit : Pistachio PIS-E01 (LIBIOS, Immunolab) |
| Cereal products (raw and primary processing): Maize, round rice, quinoa, teff flour Processed cereals: Pastry mix, mini plum cake, cookies, madeleines Spices: Mustard seed, cumin, coriander seed, paprika Sweeteners: jam, tagada candy, glucose syrup, honey Dairy products: plain yoghurt, Tesco cream dessert, fresh goat's cheese Dietary food, diet and special food: Soy yoghurt | Detection and quantification of lupin | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/590 Supplier kit: R6102 RIDASCREEN Fast Lupine / (R- BIOPHARM) |



| Cereal products (raw and primary processing): Maize, round rice, quinoa, teff flour Processed cereals: Pastry mix, mini plum cake, cookies, madeleines Spices: Mustard seed, paprika, nutmeg, pepper Sweeteners: Jam, tagada candy, glucose syrup, honey Dairy products: plain yoghurt, Tesco cream dessert, fresh goat's cheese Dietary food, diet and special food: Soy yoghurt | Detection and quantification of peanuts | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/591 Supplier kit: R6202 RIDASCREEN Fast Peanut / (R- BIOPHARM)) |
|---|---|--|--|
| Cereal products (raw and primary processing): Maize, round rice, quinoa, teff flour Processed cereal products: Pastry mix, mini plum cake, cookies, madeleines Spices: Mustard seed, paprika, nutmeg, pepper Sweeteners: Milk jam, tagada candy, glucose syrup, honey Dairy products: Chocolate yoghurt, plain yoghurt, mango yoghurt, fresh goat cheese Dried fruit: Nuts, hazelnuts, peanuts, macadamia nuts | Detection and quantification of cashew nuts | Grinding / Homogenisation Protein extraction ELISA | Internal method MOC3/592 Supplier kit: R6872 RIDASCREEN Fast Cashew (R- BIOPHARM) |



Cereal products (raw and primary processing):

Maize, rapeseed, wheat, rapeseed meal, split pea flour, split pea fibre, split pea starch and split pea protein Detection and quantification of soybeans

Grinding / Homogenisation Protein extraction ELISA Internal method MOC3/585 Supplier kit: NutriLinia Soy-E ELISA NC-6011/96 Novakits



Contaminants from packaging and materials

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Agri-Food / Other foodstuffs/ Physico- |
|--|
| chemical analysis |

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|------------------------------|--|---|
| Products of plant origin | | Extraction: Cold solid / liquid Liquid / Cold liquid Solid / liquid when hot |
| Animal products Animal feed | Organic contaminant residues | Purification: Liquid-Solid (SPE) Analysis: UFLC, LC-MS/MS, GC-MS/MS Isotope dilution LC-GC-FID |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|---|-----------------------------|
| Products of plant origin: Water-rich products Acidic and water-rich products Products high in sugar and low in water Low water and low fat products Alcoholic beverages Fruit and vegetable juices Sodas Animal products: Dairy products including baby food | Bisphenol A | Extraction: Cold solid/liquid Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/62 |
| Products of plant origin: Water-rich products Acidic and water-rich products Oil-rich products Sugar-rich, low-water products Products low in water and fat Wine Fruit and vegetable juices Products of animal origin: Processed egg products (egg pasta, madeleine, pancakes) | Determination of the content of saturated mineral oils (MOSH) and aromatic oils (MOAH) | Preparation: Cold solid/liquid or Liquid/cold liquid Analysis: LC/GC-FID | Internal method MOC3/174 |



| SUBJECT | CHARACTERISTIC MEASURED OR | PRINCIPLE OF THE | REFERENCE OF |
|--|--|---|-----------------------------|
| | RESEARCHED | METHOD | THE METHOD |
| Products of plant origin : Alcoholic beverages, Oils | Determination of Phthalates and other plasticisers: - DMP (Dimethyl phthalate) DBP (Di-iso-butyl phthalate) DBP (Di-n-butyl phthalate) BBP (Benzylbutyl phthalate) DiPP (Di-iso-pentyl phthalate) -nPiPP (n-pentyl-iso-pentyl phthalate) DHP (Di-n-nentyl phthalate) DHP (Di-n-hexyl phthalate) DEHP (Bis(2-ethylhexyl) phthalate) DCHP (Dicyclohexyl phthalate) DiHpP (Di-iso-heptyl phthalate) DiNP (Di-n-octyl phthalate) DiNP (Di-n-octyl phthalate) DiNP (Di-iso-nonyl phthalate) DiNP (Di-iso-nonyl phthalate) DiNP (Di-iso-decyl phthalate) DiBA (Di-n-butyl adipate) DBA (Di-n-butyl adipate) DBA (Di-n-butyl adipate) DBA (Di-nentyl adipate) DINCH (1,2-cyclohexanedicarboxylic acid, diisononyl ester) Tributyl O-acetylcitrate - DMEP (Bis(2-methoxyethyl) phthalate) - DMI (Dimethyl terephthalate) - DMT (Dimethyl terephthalate) - DMP (Diphenyl phthalate) - DAP (Diallyl phthalate) - DAP (Diallyl phthalate) - DEP (Diethyl phthalate) - TBP (tributylphosphate) - DEA (Diethyl adipate) - DEHA (Bis(2-ethylhexyl) adipate) - DVA (Divinyl adipate) | Extraction: Liquid / cold liquid Analysis: GC-MS-MS | Internal method MOC3/137 |



| Phytocontrol AGRIFOOD | |
|--------------------------|--|
| | |

| Neot | ormed | cont | tami | nants |
|------|-------|------|------|-------|

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Agri-Food / Other foodstuffs/ Physico- chemical analysis | | | e residues and organic contaminants in ogical matrices of animal origin - LAB |
|---|---------------------------------------|--|---|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | | PRINCIPLE OF THE METHOD |
| Products of plant origin | | | Extraction: by solvent |
| Animal products | Organic contaminant residues | | Purification: Liquid-Solid (SPE) |
| Animal feed | | | Analysis: UFLC, LC-MS/MS, GC-MS/MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope



Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|----------------------------|
| Products of plant and animal origin: Tea, cocoa, vegetable oils, soy sauce, hydrolysed vegetable proteins, infant milk | 3-MCPD (free) 2-MCPD (free) Glycidol (free) | Preparation/Extraction: Cold solid / liquid Liquid / cold liquid Purification: Bypass Analysis: GC-MS/MS | Internal method MOC3/59 |
| Yoghurt, cheese (hard, soft) Dairy fat products (butter, cream) Oil-rich products Low water and low fat products Aromatic and medicinal plants (except flowers, leaves) Feed (raw materials of plant origin and fat) Soy sauce, Hydrolysed vegetable protein Baked goods and pastries Chocolate and Cocoa Products | 3-MCPD esters 2-MCPD esters Glycidyl esters | Extraction: Solid / liquid Liquid / liquid Hydrolysis Bypass Purification: Liquid/Liquid Analysis: GC-MS/MS | Internal method MOC3/58 |



Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|---|-----------------------------|
| Products of plant origin Spices Aromatic and medicinal plants Products high in sugar and low in water Water-rich products, Oil-rich products, Acidic and water-rich products, Low water and fat products, Alcoholic beverages, Fruit and vegetable juices, Sodas Original products animal: Products of the Honeybee, Dairy products, Meat products, Fishery products, Fats Animal feed: Animal feed Miscellaneous: Cocoa | Aromatic hydrocarbons polycyclic: Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(a)pyrene, Chrysene. | Preparation / Extraction : Cold solid / liquid Purification: SPE Analysis: GC-MS/MS | Internal method MOC3/23 |
| Products of plant origin: Water-rich products and by- products, Cereals and derived products, Products high in sugar and low in water, Nuts, Fruit and vegetable juices Vegetables, Wine, cider, beer, coffee, tea Animal products: Meat products Fishery products Milk, yoghurt | Determination of Acrylamide content | Extraction: Cold solid/liquid Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/129 |



Dioxins and PCBs

Scope of accreditation No. 1-1904

FIXED range

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|----------------------------|
| Products of plant origin: Oil-rich products Water-rich products Acidic and water-rich products Products rich in sugar and low water content Low water and fat products fat Baby food | Polychlorinated dibenzo-p-dioxins (PCDD): 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD | | |
| Miscellaneous products: spices, coffee, tea, aromatic plants and medicinal | Polychlorinated dibenzofurans (PCDF): 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, | Extraction: Under hot pressure (IEP) Purification: | Internal method |
| Animal products: Dairy products (cheese, soft and hard cheeses) Egg products Meat products Fishery products Baby food | 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF, | SPE Analysis: GC-HRMS Isotope dilution | MOC3/130 |
| Animal feed: Flours of animal origin Compound feed Original raw materials plant Mineral compounds | PCB "dioxin like": PCB77, PCB81, PCB126, PCB169, PCB105, PCB114, PCB118, PCB123, PCB156, PCB157, PCB167, PCB189 Non-dioxin like PCBs (indicators): PCB28, PCB52, PCB101, PCB138, PCB 153, PCB180 | | |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|--|-----------------------------|
| Products of plant origin: Oil-rich products (vegetable oils) Alcoholic beverages Fruit and vegetable juices Soda Animal products: Dairy products (milk, yoghurt, high fat products) Fats Baby food Animal feed: Fats | Polychlorinated dibenzo-p-dioxins (PCDD): 2,3,7,8-TCDD, 1,2,3,4,7,8-PeCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD, Polychlorinated dibenzofurans (PCDF): 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 0CDF, PCB "dioxin like": PCB77, PCB81, PCB126, PCB169, PCB105, PCB114, PCB118, PCB123, PCB156, PCB157, PCB167, PCB189 Non-dioxin like PCBs (indicators): PCB28, PCB52, PCB101, PCB138, PCB 153, PCB180 | Extraction: Liquid-Liquid Purification: SPE Analysis: GC-HRMS Isotope dilution | Internal method MOC3/131 |

Fixed scope: The laboratory is recognised as competent to perform the described methods in strict compliance with the recognised methods mentioned in the scope of accreditation.

Analysis: UFLC-FLD, LC-MS/MS, GC-MS/MS



FLEX3 range

Animal feed

General scope

| Agri-Food / Other foodstuffs/ Physico- chemical analysis | | | e residues and organic contaminants in orgical matrices of animal origin - LAB GTA |
|---|--------------------|------------------------|--|
| SUBJECT | | C MEASURED OR RCHED | PRINCIPLE OF THE METHOD |
| Products of plant origin | | | Preparation/Extraction : Cold solid / liquid by solvent |
| Animal products | Organic contaminar | nt residues | Purification: Liquid-Solid (SPE) |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Other foodstuffs/ Physicochemical analysis

Analysis of pesticide residues and organic contaminants in food, feed and biological matrices of animal origin - LAB GTA 26/99-2

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|---|--------------------------------|
| | Polychlorinated dibenzo-p-dioxins (PCDD): 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD | | |
| Products of plant origin: Oil-rich products Baby food Water-rich products Acidic and water-rich products Products high in sugar and low in water Low water and low fat products Spices Aromatic and medicinal plants | Polychlorinated dibenzofurans (PCDF): 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,6,7,8-HpCDF, 1,0CDF | Preparation / Extraction : solid/liquid cold solid/liquid hot Purification: SPE Analysis : GC-MS/MS | Internal method MOC3/180 |
| Animal products: Dairy products (cheeses, pasta soft and hard cheeses) Egg products Meat products Fishery products Baby food Animal feed: Flours of animal origin Compound feed Mineral compounds Raw materials of plant origin | PCB "dioxin like" : PCB77, PCB81, PCB126, PCB169, PCB105, PCB114, PCB118, PCB123, PCB156, PCB157, PCB167, PCB189 Non-dioxin like PCBs (indicators) : PCB28, PCB52, PCB101, PCB138, PCB 153, PCB180 | Isotope dilution | |
| | Polychlorinated dibenzo-p-dioxins (PCDD): 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, | Preparation / Extraction : Cold liquid/liquid Purification: | |



1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, OCDD SPE

Analysis: GC-MS/MS Isotope dilution

Products of plant origin:

Oil-rich products (vegetable oils)

Animal products:

Dairy products (milk, yoghurt, cream, ice cream, high fat products) Fats

Baby food

Animal feed:

Fats

Polychlorinated dibenzofurans (PCDF):

2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF,

2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, OCDF

PCB "dioxin like":

PCB77, PCB81, PCB126, PCB169, PCB105, PCB114, PCB118, PCB123, PCB156, PCB157, PCB167, PCB189

Non-dioxin like PCBs

(indicators):
PCB28, PCB52, PCB101, PCB138,
PCB 153, PCB180

Internal method MOC3/181



| Veterinary drug residues | Scope of accreditation No. 1-1904 |
|--------------------------|-----------------------------------|

Range FLEX1

| #Food / Various foods / Microbiological analysis | | Analyses of authorised or unauthorised substances for veterinary or zootechnical use (veterinary medicinal products and dyes for pharmacological use) - LAB GTA 30/99-6 | |
|--|---|---|---|
| SUBJECT CHARACTERISTIC MEASURED OR RESEARCHED | | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Milk | Screening for residues with antibiotic activity | Diffusion in tubes | Delvotest T (AFNOR- DSM validation 28/02-02/12) |

FLEX3 range

General scope

| #Food / Various foods / Physico-chemical analysis | | Analyses of authorised or unauthorised substances for veterinary or zootechnical use (veterinary medicinal products and dyes for pharmacological use) - LAB GTA 30/99-6 | |
|--|---|---|---|
| SUBJECT | . CHARACTERISTIC MEASURED OR RESEARCHED | | PRINCIPLE OF THE METHOD |
| Foodstuffs Biological matrices of animal origin | Veterinary drug residues | | Preparation: Solvent extraction Hydrolysis Bypass Purification: Dispersive SPE SPE Analysis: LC-MS/MS LC-HRMS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

#Food / Various foods / Physicochemical analysis

Analysis of authorised or unauthorised substances for veterinary or zootechnical use (veterinary medicines) LAB GTA 30/99-6

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|--|-----------------------------|
| Eggs Muscles Milk Honey Fishery products: fish, shellfish, crustaceans | Chloramphenicol Method of screening and | Preparation: Solvent extraction Purification: dispersive SPE Analysis: LC-MS/MS | Internal method MOC3/147 |
| Muscles, Fishery products, Eggs, Milk | confirmation of: 2-aminoflubendazole, Albendazole, Cambendazole, Diazinon, Ethopabate, Fenobucarb, Florfenicol, Flunixin, Haloperidol, Ipronidazole metabolite (IPZ-OH), Levamisole, Mebendazole, Sulfaethoxypyridazine, Sulfamethoxazole, Sulfamoxole, Sulfathiazole, Sulfisomidine, Tilmicosin, Trichlorfon, Trimethoprim, Xylazine | Preparation: Solids/Liquids (by solvent) Liquid/Liquid (by solvent) Purification: Liquid/solid (SPE) Analysis: LC-HRMS, LC-MS/MS | Internal method MOC3/146 |
| Honey | Determination of nitrofurans : AOZ, AMOZ, SEM, AHD | Preparation: Solvent extraction Hydrolysis Bypass Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/452 |



#Food / Various foods / Physicochemical analysis

Analysis of authorised or unauthorised substances for veterinary or zootechnical use (veterinary medicines) - LAB GTA 30/99-6

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---------------------------------------|---|--|-----------------------------|
| Eggs Muscles Milk Fishery products | Determination of nitrofurans: AHD (1-Aminohydantoin) AMOZ (3-Amino-5- morpholinomethyl-2- oxazolidinone) AOZ (3-amino-2-oxazolidinone) SEM (Semicarbazide) DNSH (3,5-Dinitrosalicyhydrazide) | Preparation: Solvent extraction Hydrolysis Bypass Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/459 |
| Honey | tetracyclines: oxytetracycline, 4-epi-oxytetracycline, tetracycline, 4-epi-tetracycline, demeclocycline, metacycline Quinolones: Σ of enrofloxacin and ciproflo - xacin, enrofloxacin, ciprofloxacin, nalidixic acid, oxolinic acid, cinoxacin, difloxacin, enoxacin, fleroxacin, flumequine, lomefloxacin, marbofloxacin, norfloxacin, orbifloxacin, sarafloxacin, sparfloxacin, pazufloxacin, pipemidic acid, pefloxacin, nadifloxacin Nitroimidazoles: metronidazole hydroxide, dimetridazole, metronidazole, ipronidazole and other pharmacologically active substances: Lincomycin | Preparation: Solvent extraction Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/453 |
| Honey | Determination of aminoglycosides: Apramycin, Dihydrostreptomycin, Kanamycin, Spectinomycin, Paromomycin, Streptomycin, Neomycin B | Preparation: Solvent extraction Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/450 |



| Honey | Determination of sulfonamides : dapsone, Sulfabenzamide, Sulfacetamide, Sulfachloropyridazine, Sulfaclozine.sulfachloropyrazine, Sulfadiazine, Sulfadimethoxine, Sulfadimidine, Sulfadoxine, Sulfaguanidine, Sulfamerazine, Sulfaguanidine, Sulfamerazine, Sulfameter.Sulfamethoxydiazine, Sulfamethoxypyridazine, Sulfamethoxypyridazine, Sulfamethoxypyridazine, Sulfamonomethoxine, Sulfamoxole, Sulfaphenazole, Sulfapyridine, Sulfaquinoxaline, Sulfasalazine, Sulfathiazole, Sulfatroxazole, Sulfafurazole, Sulfisoxazole, Sulfafurazole, Sulfisozole | Preparation: Solvent extraction Purification: SPE Analysis: LC-MS/MS | Internal method MOC3/458 |
|--|--|--|-----------------------------|
| Eggs Muscles Milk Fishery products Honey | Determination of nitroimidazoles: Ronidazole Metronidazole Ipronidazole Dimetridazole Ternidazole Secnidazole Tinidazole and metabolites (2-hydroxy-metronidazole, 2-hydroxy-ipronidazole, HMMNI (2-hydroxy-dimetridazole)) | Preparation: Solvent extraction Analysis: LC-MS/MS | Internal method MOC3/456 |



| Food | co | lourings |
|------|----|----------|

Scope of accreditation No. 1-1904

FLEX3 range

General scope

Agri-Food / Various foodstuffs, Dairy products, Meat products, Sea products, Beverages (except drinking water) and sweetened products / Physico-chemical analyses

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-80-118

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|-----------------|--|------------------------------------|
| Human nutrition | Determination of dye content | Preparation: Solvent extraction |
| | | Analysis : LC-MS/MS UFLC-DAD |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope



Agri-Food / Various foodstuffs, Dairy products, Meat products, Sea products, Beverages (except drinking water) and sweetened products / Physico-chemical analyses

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-80-118

| allalyses | | | |
|---|---|--|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Spices and condiments Compound feed Sauce | Determination of dyes: Auramine, Fast garnet GBC, Oil orange SS, Para red, P-nitroaniline, Sudan blue 2, Sudan I, Sudan II, Sudan III, Sum (Sudan IV + Sudan red 7B), Sudan red G, Sudan yellow, Toluidine red, Leucomalachite green. | Extraction: by solvent Analysis: LC-MS/MS | Internal method MOC3/163 |
| Non-alcoholic beverages | Determination of dyes: E101, E110, E122, E123, E124, E129, E131, E132, E133, E151 | Extraction: by solvent Analysis: UFLC-DAD | Internal method MOC3/161 |
| Compound feed Spices and condiments Dairy products Meat products Fishery products Coffee, Tea, Infusion Non-alcoholic beverages | Curcuminoids Curcumin Bis-demethoxycurcumin demethoxycurcumin | Extraction : By solvent Analysis : LC-MS/MS | Internal method MOC3/162 |

<u>Fixed scope:</u> The laboratory is recognised as competent to perform the tests in strict accordance with the methods mentioned in the scope of accreditation. Technical modifications of the procedure are not allowed.



Nutritional values

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119 | |
|--|--|--|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | |
| Food for human consumption Animal feed | Determination of sodium content | Preparation: Mineralization (wet process) Analysis: ICP-MS | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| chemical analysis | | | |
|--|---|--|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Fatty products Sweetened and sugared products Cereal products Egg products Meat products Fishery products Coffee, Tea, Infusion Non-alcoholic beverages Spices and condiments Diet foods, special foods, special diets | Determination of total sodium content and calculation of salt content | Preparation: Mineralization (wet process) Analysis: ICP-MS | Internal method MOC3/152 |
| Animal feed: Complete or complementary compound feeds Raw materials for animal feed | | | |



General scope

| Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119 |
|--|--|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
| Food for human consumption | Determination of carbohydrate components | Preparation: Water extraction Analysis: Ion Chromatography / Pulsed Amperometry |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physico-chemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| anarysis | | | |
|--|--|--|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Sweetened and sugared products Cereal products Dietary foods | Determination of Fructose, Glucose, Lactose, Maltose, Sucrose | Preparation: Water extraction Analysis: Ion Chromatography / Pulsed Amperometry | Internal method MOC3/168 |



Nutritional values

Scope of accreditation No. 1-1904

FLEX3 range

General scope

| Food / Various foodstuffs, Meat products, Fats, Beverages (except drinking water) and sweetened products, Cereal products / Physico-chemical analyses | | Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-80-82-118-119 | |
|---|---|--|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | |
| Food for human consumption | Extraction of fat for characterisation Determination of fatty acid methyl esters | Preparation: Solvent extraction: n-hexane / Isopropanol 3 /2 (v/v) Methylation Analysis: GC-FID | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope



Food / Various foodstuffs, Meat products, Fats, Beverages (except drinking water) and sweetened products, Cereal products / Physico-chemical analyses

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-80-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|-----------------------------|
| Fatty products Sweetened and sugared products Diet foods, special foods, special diets Meat products Cereal products except raw cereals | Extraction of fat for characterisation | Solvent extraction: n-hexane / Isopropanol 3 /2 (v/v) | Internal method MOC3/160 |
| Fatty products Sweetened and sugared products Diet foods, special foods, special diets Meat products Cereal products except raw cereals | Determination of fatty acid methyl esters | Preparation: Methylation Analysis: GC-FID | Internal method MOC3/160 |



FIXED range

Food / Various foods, Dairy products, Meat products, Seafood, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physico-chemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-80-81-82-118-119

| anaiysis | | | |
|--|--|---|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Food for human consumption: Fruits and vegetables Diet foods Dietary foods Special foods Spices and condiments Dairy products Meat products Fishery products Sweetened productsCoffee , tea, infusions Cereal products Animal feed: Compound feed | Determination of water activity | Hygrometry (Dew point principle) | Internal method MOC3/155 |
| Fruit, Processed fruit Ice cream Non-alcoholic beverages Honey | Determination of Sugar content (Brix degree) | Refractometry | Internal method MOC3/169 |
| Food for human consumption: Dietary foods Compound feed Fruit and vegetables Fatty products Sweetened and sugared products Cereal products | Determination of total nitrogen content and calculation of protein content | Dumas method: O2 combustion Detection by catharometry | Internal method MOC3/186 |
| Animal feed: Compound feeds and raw materials | | | |

<u>Fixed scope:</u> The laboratory is recognised as competent to perform the tests in strict accordance with the methods mentioned in the scope of accreditation. Technical modifications of the procedure are not allowed.

FIXED range



| Including / Meat products, Seafood / Physico- chemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/80 | |
|--|--|--|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Fishery products | Determination of the total volatile basic acid concentration (ABVT) and trimethylamine (TMA) | Preparation: Filtration Distillation Analysis: Titrimetry | Internal method MOC3/188 |
| Meat products | Determination of starch content | Preparation: Dissolution Hydrolysis Filtration Analysis: Titrimetry | Internal method MOC3/561 |
| Meat products | Determination of the L(-)hydroxyproline and calculation of collagen content | Preparation: Dissolution Acid hydrolysis Filtration Analysis: Colorimetry | Internal method MOC3/189 |

FIXED range

| Including / Fat / Physico-chemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/82 | |
|---|---------------------------------------|--|-----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Fatty products: Oilseeds Nuts Mayonnaise | Determination of the peroxide value | Titrimetry | Internal method MOC3/171 |

<u>Fixed scope:</u> The laboratory is recognised as competent to perform the tests in strict accordance with the methods mentioned in the scope of accreditation. Technical modifications of the procedure are not allowed.



Range FLEX1

| Including / Fat / Physico-chemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/82 | |
|---|--|--|----------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD REFERENCE OF THE METHO | |
| Fats of animal and vegetable origin | Determination of acid number and acidity | Titrimetry | NF EN ISO 660 |
| Milkfat and butter products | Determination of acid number and acidity | Titrimetry | NF EN ISO 1740 |
| Fats of animal and vegetable origin | Determination of the peroxide value | Titrimetry | NF EN ISO 3960 |

<u>Flexible scope FLEX1:</u> The laboratory is recognised as competent to perform the tests according to the referenced methods and their subsequent revisions.

FLEX3 range

General scope

Agri-Food / Various foodstuffs, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-82

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|----------------------------|--|-------------------------|
| Food for human consumption | Determination of acid number and acidity | Titrimetry |

Detailed scope



Including / Various foods, Beverages (except drinking water) and sweetened products, Cereal products / Physico-chemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-82

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|---|--|-------------------------|--------------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Fatty products: oilseeds nuts mayonnaise Compound feed | Determination of acid number and acidity | Titrimetry | Internal method MOC3/172 |

Range FLEX1

| Including / Dairy products / Physico-chemical analysis | | Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/61 | |
|--|---------------------------------------|--|----------------------------|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
| Milk | Determination of the fat content | Gravimetric method | NF EN ISO 1211 |
| Milk, cream and unsweetened condensed milk | Determination of dry matter | Oven drying Gravimetry | NF EN ISO 6731 |

<u>Flexible scope FLEX1:</u> The laboratory is recognised as competent to perform the tests according to the referenced methods and their subsequent revisions.



General scope

Agri-Food / Various foodstuffs, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|----------------------------|--|---|
| Food for human consumption | Determination of dietary fibre content | Preparation: Automatic enzymatic digestion |
| | | Analysis: Gravimetry |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

| Including / Various foods, Beverages |
|---------------------------------------|
| (except drinking water) and sweetened |
| products, Cereal products / |
| Physico-chemical analysis |
| |

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|--|-----------------------------|
| Diet food, Diet food, Special diet Fruit and vegetables Compound feed Sweetened and sugared products | | Preparation: Automatic enzymatic digestion | Internal method MOC3/165 |
| Cereal products Spices and condiments | | Analysis: Gravimetry | |



General scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|---|--|--|
| Food for human consumption Animal feed | Determination of total lipid content | Preparation: Acid hydrolysis Microwave hydrolysis Solvent extraction Microwave extraction Analysis: Gravimetry |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|--|-----------------------------|
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Fatty products excluding seeds oilseeds Sweetened and sugared products Cereal products except raw cereals Dietary foods Spices and condiments Meat products Non-drinks alcoholic beverages Animal feed: Complete or complementary compound feeds | Determination of total lipid content | Preparation: Hydrolysis Solvent extraction Analysis: Gravimetry | Internal method MOC3/154 |
| Food for human consumption: Fruit and vegetables Compound feed Dietary foods Cereal products Dairy products Meat products/fishery products Fatty products Sweetened and sugared products Non-alcoholic beverages Animal Feed: Compound feed Raw material | Determination of total lipid content | Preparation: Microwave hydrolysis Microwave extraction Analysis: Gravimetry | Internal method MOC3/560 |



General scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|---|--|--|
| Food for human consumption Animal feed | Determination of total nitrogen content | Kjeldahl: Mineralization Distillation Titrimetry |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|---|-----------------------------|
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Fatty products Sweetened and sugared products Cereal products Dietary foods Spices and condiments Animal feed: Complete compound feed or complementary | Determination of total nitrogen content and calculation of protein content | Kjeldahl : Mineralization Distillation Titrimetry | Internal method MOC3/153 |



General scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|----------------------------|--|----------------------------------|
| Food for human consumption | Determination of humidity | Desiccation Gravimetry |
| Animal feed | Determination of ash content | Dry mineralisation Gravimetry |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.



Detailed scope

Agri-Food / Various foodstuffs, Dairy products, Animal feed, Fats and oils, Beverages (except drinking water) and sweetened products, Cereal products / Physicochemical analysis

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in food and feed - LAB GTA 25/60-61-81-82-118-119

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|----------------------------------|-----------------------------|
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Fatty products excluding seeds oilseeds Sweetened and sugared products Cereal products except raw cereals Dietary foods Spices and condiments Non-alcoholic beverages Animal feed: Complete compound feed or complementary Raw materials | Determination of dry matter content or water content | Desiccation Gravimetry | Internal method MOC3/150 |
| Food for human consumption: Fruit and vegetables Compound feed Dairy products Fatty products excluding seeds oilseeds Sweetened and sugared products Cereal products except raw cereals Dietary foods Spices and condiments Animal feed: Complete compound feed or complementary | Determination of ash content | Dry mineralisation Gravimetry | Internal method MOC3/151 |



General scope

Agri-Food / Miscellaneous foodstuffs, Beverages (except drinking water) and sweetened products / Physico-chemical analyses

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in Food for human consumption - LAB GTA 25/60-118

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD |
|----------------------------|--|--|
| Food for human consumption | Determination of sulphite content | Preparation: Solid / liquid extraction Bypass Purification: Liquid/solid extraction (SPE) Analysis: LC-MS/MS |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope



Agri-Food / Miscellaneous foodstuffs, Beverages (except drinking water) and sweetened products / Physico-chemical analyses

Physico-chemical analyses for the determination of composition, quality and technological criteria, and nutritional labelling in Food for human consumption LAB GTA 25/60-118

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|--|--|-----------------------------|
| Fruit and vegetables Compound feed Non-alcoholic beverages | Determination of sulphite content | Preparation: Solid/liquid extraction Bypass Purification: Liquid/solid extraction (SPE) Analysis: LC-MS/MS | Internal method MOC3/132 |

Norovirus and Hepatitis A

Scope of accreditation No. 1-1904

FLEX3 range

General scope



| Agri-Food / Various foods / Microbiological analysis | | Microbiological analysis of food products and environment - LAB GTA 59 | |
|--|---|---|--|
| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | |
| Frozen/fresh fruit and vegetables Bivalve molluscs Food surface swab samples | Hepatitis A virus genome | Manual extraction of viral RNA by silica adsorption Real-time RT-PCR amplification (qualitative method) | |
| Frozen/fresh fruit and vegetables Bivalve molluscs Food surface swab samples | Norovirus genome Genogroups GI and GII | Manual extraction of viral RNA by silica adsorption Real-time RT-PCR amplification (qualitative method) | |

FLEX3 flexible scope: The laboratory is recognised as competent, in the field covered by the general scope, to adopt any recognised method and to develop or implement any other method for which it has ensured validation.

Detailed scope

Agri-Food / Various foods / Microbiological analysis

Microbiological analysis of food products and environment - LAB GTA 59



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|-----------------------------|
| Frozen/fresh fruit and vegetables Bivalve molluscs Food surface swab samples | Hepatitis A virus genome | Manual extraction of viral RNA by silica adsorption Real-time RT-PCR amplification (qualitative method) | Internal method MOC3/199 |
| Frozen/fresh fruit and vegetables Bivalve molluscs Food surface swab samples | Norovirus genome Genogroups GI and GII | Manual extraction of viral RNA by silica adsorption Real-time RT-PCR amplification (qualitative method) | Internal method MOC3/199 |



Food microbiology

Scope of accreditation No. 1-6066

Range FLEX1

Agri-Food / Various foods / Microbiological analysis

Microbiological analysis of food products and environment - LAB GTA 59

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|---|--|--|----------------------------|
| Products for human consumption, animal feed and environmental samples | Micro-organisms | Enumeration of colonies at 30°C using the deep seeding technique | NF EN ISO 4833- 1 |
| Products for human consumption, animal feed and environmental samples | Micro-organisms | Enumeration of colonies at 30°C by surface plating technique | NF EN ISO 4833- 2 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Enterobacteriaceae | Search and enumeration by MPN technique with pre- enrichment at 30°C or 37°C | NF ISO 21528-1 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Enterobacteriaceae | Colony count at 37°C (or 30°C) | NF ISO 21528-2 |
| All food and feed products and samples from the production environment | Enterobacteriaceae | Colony count at 37°C | BRD 07/24-11/13 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Coliforms | Search and enumeration by MPN technique at 30°C (or 37°C) | NF ISO 4831 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Coliforms | Colony count at 30°C (or 37°C) | NF ISO 4832 |
| Products intended for human consumption or animal feed | Thermotolerant coliforms | Enumeration of colonies at 44°C | NF V08-060 |
| Products intended for human consumption or animal feed | Escherichia coli - β-glucuronidase positive | Enumeration of colonies at 44°C | NF ISO 16649-2 |

| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|-------------------|--|--|----------------------------|
| All food products | Coliforms | Colony count at 37°C by RAPID chromogenic medium <i>E.coli</i> 2 | BRD 07/08-12/04 |



| All food and feed products | Escherichia coli -β-glucuronidase positive | Colony count at 37°C by RAPID chromogenic medium E.coli 2 | BRD 07/07-12/04 |
|---|--|---|----------------------|
| All food and feed products | Enterobacteriaceae | Colony count at 37°C by medium chromogenic REBECCA™ + EB | AES 10/07-01/08 |
| All food and feed products | Escherichia coli - β - glucuronidase positive | Colony count at 37°C by medium chromogenic REBECCA™ BASE or REBECCA™+ EB | AES 10/06-01/08 |
| Products intended for human consumption or animal feed | Escherichia coli O157 | Enrichment Separation / Concentration Isolation - Confirmation | NF EN ISO 16654 |
| Raw meat products, raw plant products, raw milk, raw milk-based dairy products and samples from the industrial production environment | Escherichia coli O157 | Enzyme-linked immunosorbent assay (ELFA) VIDAS® UP E.coli O157 including H7 (VIDAS ECPT) automated system | BIO 12/25- 05/09 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Suspected Escherichia coli | Search and enumeration by MPN technique at 37°C then 44°C | NF ISO 7251 |
| Products intended for human consumption or animal feed | Coagulase positive staphylococci | Enumeration of colonies at 35°C or 37°C using Baird Parker agar medium | NF EN ISO 6888- 1 |
| Products intended for human consumption or animal feed | Coagulase positive staphylococci | Aerobic enumeration of colonies at 35°C or 37°C using rabbit plasma and fibrinogen agar medium | NF EN ISO 6888- 2 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Coagulase positive staphylococci | Search and enumeration by MPN technique for small numbers | NF EN ISO 6888-3 |



| SUBJECT | CHARACTERISTIC MEASURED OR RESEARCHED | PRINCIPLE OF THE METHOD | REFERENCE OF THE METHOD |
|--|---|---|--|
| All food products | Coagulase positive staphylococci | Enumeration of colonies at 37°C on RAPID'Staph specific medium and confirmation | Nordval n°049 Nordval certified method |
| Products intended for human consumption or animal feed | Sulphite-reducing bacteria | Colony count at 46°C under anaerobic conditions | NF V08-061 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Sulphite-reducing bacteria growing under anaerobic conditions | Colony count at 37°C | NF ISO 15213 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Clostridium perfringens | Colony count at 37°C and confirmation | NF EN ISO 7937 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Presumptive Bacillus cereus | Colony count at 30°C | NF EN ISO 7932 |
| All food and feed products | Presumptive Bacillus cereus | Enumeration at 30°C by Compass® chromogenic medium Bacillus cereus Agar | BKR 23/06-02/10 |
| Products intended for human consumption or animal feed | Mesophilic lactic acid bacteria | Colony count at 30°C | NF ISO 15214 |
| Meat and meat products | Pseudomonas spp | Colony count at 25°C | NF EN ISO 13720 |
| Products intended for human consumption or animal feed | Yeasts and moulds | Colony count at 25°C | NF V08-059 |
| All food and feed products | Yeasts and moulds | Colony count at 25°C on Symphony medium | BKR 23/11- 12/18 |
| Products intended for human consumption or animal feed | Yeasts and moulds growing on a low water activity medium | Colony count at 25°C | NF V08-036 |
| Products intended for human consumption or animal feed and samples of the food production and distribution environment | Listeria monocytogenes and Listeria spp | Colony count at 37°C and confirmation | NF EN ISO 11290-2 |
| All food products and environmental samples | Listeria monocytogenes and Listeria spp | Enumeration at 37°C by chromogenic medium ALOA COUNT™ | AES 10/05-09/06 |
| Products intended for human consumption or animal feed, environmental samples from the including sector | Salmonella spp. including Salmonella Typhi and Salmonella Paratyphi | Search Isolation / Identification and confirmation | NF EN ISO 6579- 1 |
| All food and feed products and samples from the production environment | Salmonella | RAPID chromogenic medium search Salmonella | BRD 07/11-12/05 |
| All food and feed products and environmental samples (excluding livestock environment) | Salmonella spp | IQ-Check Salmonella II real- time PCR | BRD 07/06-07/04 |
| Products intended for human consumption or animal feed and samples of the food production and distribution environment | Listeria monocytogenes and Listeria spp | Search Isolation / Identification and confirmation | NF EN ISO 11290-1 |



| Food products and environmental samples | Listeria monocytogenes and Listeria spp. | Research at 37°C by chromogenic medium ALOA ONE DAY™ | AES 10/03-09/00 |
|---|---|--|----------------------|
| Products intended for human consumption or animal feed, environmental samples from the including sector | Campylobacter spp. | Colony count at 41.5°C | NF EN ISO 10272-2 |
| Products and ingredients intended for human consumption or animal feed, environmental samples taken in the food production and handling sectors | Cronobacter spp | Search Isolation / Identification and confirmation | NF EN ISO 22964 |

Flexible scope FLEX1: The laboratory is recognised as competent to perform the tests according to the referenced methods and their subsequent revisions.

Accreditation made compulsory in the French regulatory framework specified by the text referred to in the document Cofrac LAB INF 99 available on www.cofrac.fr.