TYPE OF ANALYSIS: PHYSICAL CHEMICALS

Matrix	Determination	Minimum quantity required	Appropriate packaging type	Maximum period to start analysis from sampling	Transport conditions	Conservation conditions during analysis	Conservation time	Laboratory location / Waiting area
Soil	***All included in the sample sets and determinations list***	2 or 3 kg (if it includes coarse fraction)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contamination with particles from the environment, with other types of samples and / or pollutants.	**1 month** Room temperature	ZE3
Soil	***All included in the sample sets and determinations list***	1 or 2 kg (if it does not include coarse fraction)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**1 month** Room temperature	ZE3
Sludge, sediments, solid waste and leaching materials	***All included in the sample sets and determinations list***	1 or 2 kg	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	12 h from sampling until refrigeration, and a maximum period of **7 days** to start the analysis.	**Cooling temperature**	**Cooling temperature**	Raw sample: **1 month** at room temperature. Prepared: **1 month** at room temperature. Others: Consult Technical Director	ZE3

Solid chemicals and fertilizers	***All included in the sample sets and determinations list***	100 or 200 g (preferably homogeneous)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**7 days**	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**60 days** Room temperature	ZE5 ZE4
Liquid chemicals and fertilizers	***All included in the sample sets and determinations list***	100 or 200 ml (preferably homogeneous)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**60 days** Room temperature	ZE6
Leaf and fresh plant material	***All included in the sample sets and determinations list***	100 or 200 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	24 h from sampling until refrigeration, and a maximum period of **4 days** to start the analysis.	**Cooling temperature**	**Cooling temperature**	Fresh: **1 week** Dry: **1 month**	Z E1 ZE(0)1
Leaf and dry plant material	***All included in the sample sets and determinations list***	10 or 20 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**1 month** Room temperature	ZE1 ZE(0)1

Food (metals)	***All included in the sample sets and determinations list***	200 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	Products with low moisture content: **10 days.** Canned products: **30 days**. Fresh products: **5 days** in refrigeration. Frozen: **30 days** in freezing.	**Room temperature:** Products with low moisture content and canned food. **Cooling temperature: fresh product**. **Freezing temperature:** Frozen products.	**Room temperature :** Product with low moisture content. **Cooling temperature:** Fresh produce and canned food once opened. **Congelation temperature:** Freezing product	Products with low moisture content at room temperature : **1 month.** Original sample from fresh products, opened canned food and defrosted products at cooling temperature At cooling temperature : **1 week.** Homogenized food in freezing: **1 month.**	ZE (0) 10 ZE (-0) 10
Food (other parameters)	***All included in the sample sets and determinations list***	500 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	Products with low moisture content: **10 days.** Canned: **30 days.** Fresh products: **5 days** in refrigeration. Frozen: **30 days** in freezing.	**Room temperature:** Products with low moisture content and canned food. **Cooling temperature:fresh product**. **Freezing temperature:** Frozen products.	**Room temperature :** Product with low moisture content. **Cooling temperature:** Fresh products and canned food once opened. **Freezing temperature:** Freezing product	Product with low moisture content at Room temperature : **1 month.** Original sample from fresh products, opened canned food and defrosted products at cooling temperature: **1 week.** Homogenized food in freezing: **1 month.**	ZE (0) 10 ZE (-0) 10
Waters	***Oils and fats***	1 l	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Alkalinity (carbonates, bicarbonates, hydroxides)	10 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Dissolved Aluminum	20 ml	High density polyethylene Polyethylene phthalate	**1 month**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Ammonium	300 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Arsenic	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**1 month**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Barium	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**1 month**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Boron	20 ml	High density polyethylene Polyethylene phthalate	**1 month**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Bromide	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Cadmium	20 ml	High density polyethylene Polyethylene phthalate Borosilicate glass	**1 month**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Calcium	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Total organic carbon	25 ml	All kinds of glass	**7 days**	**Cooling temperature**	**Cooling temperature** Preparation of the sample to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Easily released cyanides	20 ml	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Total cyanides	20 ml	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Chlorophylls	5 l	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Chlorides	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**1 month**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Free residual chlorine	10 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediate determination *in situ* or **cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Combined residual chlorine	10 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediate determination *in situ* or **cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Color	10 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** And darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Conductivity	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediate determination *in situ* or **cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	BOD5	500 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Detergents	20 ml	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	COD	10 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**5 days**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3, **Cooling temperature** and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Phenols	10 ml	Borosilicate glass	**24 hours**	**Cooling temperature**	**Cooling temperature** and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Fluorides	20 ml	High density polyethylene Polyethylene phthalate	**1 month**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Dissolved phosphate	20 ml	Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Filtrate *in situ* preferably and **Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Total phosphorus	2 0 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours** or **1 month** if sample preparation is carried out	**Cooling temperature**	**Cooling temperature** or sample preparation to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Phenol Index	10 ml	Borosilicate glass	**24 hours**	**Cooling temperature**	Inhibition of biochemical oxidation or $CuSO_4$ and acidification with H_3PO_4 to pH <2	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Setstling Matter	1 l	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Total mercury	20 ml	Borosilicate glass	**24 hours**	**Cooling temperature**	Acidification to pH <2 with HNO_3 and addition of $K_2Cr_2O_7$ [final concentration of 0.05 % (m / m)]	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Dissolved metals	100 ml	High density polyethylene Polyethylene phthalate	**1 month**	**Cooling temperature**	Filtrate *in situ* preferably and sample preparation to pH = 2 with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Total metals	100 ml	High density polyethylene Polyethylene phthalate	**1 month**	**Cooling temperature**	Sample preparation up to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Nitrates	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** or sample preparation to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Nitrites	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Kjeldahl Nitrogen	100 ml	High density polyethylene Polyethylene phthalate Borosilicate glass	**24 hours**	**Cooling temperature**	Sample preparation to pH = 2, with H_2SO_4 or HNO_3 and darkness	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Odor	100 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Oxidability (Permanganate index)	100 ml	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature** and sample preparation to pH = 2, with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Dissolved oxygen	---	High density polyethylene Polyethylene phthalate All kinds of glass	***In situ***	**Cooling temperature**	Immediate determination *in situ*	**1 month** Cooling temperature	ZE (0) 2 ZE2

	pH	50 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediate determination *in situ* or **cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Dry residue	200 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Selenium	20 ml	All kinds of glass	**1 month**	**Cooling temperature**	Acidification at pH <1, except if there are selenides. If they are present, alkalinize at pH <11 with NaOH or **Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Total and dissolved silicates	20 ml	High density polyethylene Polyethylene phthalate	**24 hours**	**Cooling temperature**	**Cooling temperature** and sample preparation to pH = 2 with H_2SO_4 or HNO_3	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Suspended solids	1 l	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Volatile suspended solids	1 l	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	---	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Sulfates	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**7 days**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2

	Sulphides	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediately fix the samples *in situ,* alkalizing if necessary, with sodium carbonate and adding Zinc acetate	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Temperature	---	High density polyethylene Polyethylene phthalate All kinds of glass	***In situ***	**Cooling temperature**	Immediate determination *in situ*	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Anionic surfactants	250 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2 ZE2
	Cationic surfactants	250 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2
	Toxicity	100 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2
	Turbidity	20 ml	High density polyethylene Polyethylene phthalate All kinds of glass	**24 hours**	**Cooling temperature**	Immediate determination *in situ* or **cooling temperature**	**1 month** Cooling temperature	ZE (0) 2
	Iodides	20 ml	All kinds of glass	**24 hours**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 2

TYPE OF ANALYSIS: MICROBIOLOGICAL

Matrix	Determination	Minimum quantity required	Appropriate packaging type	Maximum period to start analysis from sampling	Transport conditions	Conservation conditions during analysis	Conservation time	Laboratory location
								Waiting area
Foods	***Enumeration***	Recommended: 200 g Minimum: 20 g	Original container or aseptic closed container	Perishable samples: **1 day.** Nonperishable samples (canned, frozen samples ...): **1 week.**	According to usual storage	According to usual storage after opening	**1 week**	Freezing: EQ-GEN-254 Cold storage ZE (0) 8 Room temperature
Foods	***Detection***	Recommended: double the minimum. Minimum : Quantity in which the result is expressed (for example, "Not detected in 25 g" requires a minimum of 25 g and a recommended amount of 50 g)	Original container or aseptic closed container	Perishable samples: **1 day.** Nonperishable samples (canned, frozen samples ...): **1 week.**	According to usual storage	According to usual storage after opening	**1 week**	Freezing: EQ-GEN-254 Cold storage ZE (0) 8 Room temperature

Fertilizers	***Enumeration***	Recommended: 200 g Minimum: 20 g	Original container or aseptic closed container	Perishable samples or subject to modification: **1 day.** Stable samples (stabilized biofertilizers, inorganic fertilizers): **1 week.**	**Cooling temperature** In the case of biofertilizers, respect the manufacturer's storage conditions.	**Cooling temperature** In the case of biofertilizers, respect the manufacturer's storage conditions.	**1 month**	Cold storage: ZE (0) 8 Room temperature
Fertilizers	***Detection***	Recommended: double the minimum. Minimum : Quantity in which the result is expressed (for example, "Not detected in 25 g" requires a minimum of 25 g and a recommended amount of 50 g)	Original container or aseptic closed container	Perishable samples or subject to modification: **1 day** Stable samples (stabilized biofertilizers, inorganic fertilizers): **1 week.**	**Cooling temperature** In the case of biofertilizers, respect the manufacturer's storage conditions.	**Cooling temperature** In the case of biofertilizers, respect the manufacturer's storage conditions.	**1 month**	Cold storage ZE (0) 8 Room temperature
Fertilizers	***Test of viable weed seed propagules (determination of adventitious flora)***	1 kg	Aseptic closed container	**1 week**	**Room temperature**	**Room temperature**	Not applicable (whole sample processed)	Room temperature

Fertilizers	***Plant response (Pot growth test with Chinese cabbage)***	1 kg	Aseptic closed container	**1 week**	**Room temperature**	**Room temperature**	Not applicable (whole sample processed)	Room temperature
Soils and sludges	***Enumeration***	Recommended: 200 g Minimum: 20 g	Aseptic closed container	**1 day**	**Cooling temperature**	**Cooling temperature**	**1 month**	ZE (0) 8

Soils and sludges	***Detection***	Recommended: double the minimum. Minimum : Quantity in which the result is expressed (for example, "Not detected in 25 g" requires a minimum of 25 g and a recommended amount of 50 g)	Aseptic closed container	**1 day**	**Cooling temperature**	**Cooling temperature**	**1 month**	ZE (0) 8
Soils (substrates)	***Test of viable weed seed propagules (determination of adventitious flora)***	1 kg	Aseptic closed container	**1 week**	**Room temperature**	**Room temperature**	Not applicable (whole sample processed)	Room temperature

Soils (substrates)	***Plant response (Pot growth test with Chinese cabbage)***	1 kg	Aseptic closed container	**1 week**	**Room temperature**	**Room temperature**	Not applicable (whole sample processed)	Room temperature
Waters	***Enumeration in 1 ml*** [(1)]	Recommended: 200 ml Minimum: 20 ml	Closed aseptic container (with suitable neutralizer if inactivation of disinfectants is required).	**8 hours** (recommended guideline)	**Cooling temperature**	**Cooling temperature**	**15 days**	ZE (0) 8

Waters	***Enumeration in 100 ml*** [(1)]	Recommended: 250 ml per determination Minimum: 150 ml	Closed aseptic container (with suitable neutralizer if inactivation of disinfectants is required).	**8 hours** (recommended guideline)	**Cooling temperature**	**Cooling temperature**	**15 days**	ZE (0) 8
Waters	***Detection*** [(1)]	Quantity in which the result is expressed (For example, "Not detected in 1 litre" requires a minimum of 1 litre)	Closed aseptic container (with suitable neutralizer if inactivation of disinfectants is required).	**8 hours** (recommended guideline)	**Cooling temperature**	**Cooling temperature**	**15 days**	ZE (0) 8

Waters	***Legionella spp / L. pneumophila*** [(1)]	1 litre	Closed aseptic container (with suitable neutralizer if inactivation of disinfectants is required).	Recommended : **1 day** Maximum : **5 days**	**Cooling temperature (6-18 ºC)**	**Cooling temperature (6-18 ºC)**	**15 days**	ZE (0) 2
Waters	***Helminth eggs*** [(1)]	10 litres	Closed aseptic container (with suitable neutralizer if inactivation of disinfectants is required).	**1 day.** With preservative (formaldehyde 4%): **2 months.**	**Room temperature**	Not applicable (whole sample processed)	Not applicable (whole sample processed)	ZP8

Swabs	***Enumeration*** [2,3]	1 swab for various determinations (maximum 6 determinations per swab).	Dry surfaces: Swab with 10 ml of maximum recovery diluent (MRD). Moist surfaces without the presence of disinfectants: Dry swab. Surfaces (wet or dry) treated with disinfectants or unknown status: Swab with 10 ml of neutralizing rinse solution (NRS). Sample size: 100 cm^2 typically acceptable	**1 day**	**Cooling temperature**	**Cooling temperature**	**1 week**	ZE (0) 8
Swabs	***Detection*** [2]	1 swab for each determination	Dry surfaces: Swab with 10 ml of maximum recovery diluent (MRD). Moist surfaces without the presence of disinfectants: Dry swab. Surfaces (wet or dry) treated with disinfectants or unknown status: Swab with 10 ml of neutralizing rinse solution (NRS). Sample size: 100 cm^2 typically acceptable	**1 day**	**Cooling temperature**	Not applicable (whole sample processed)	Not applicable (whole sample processed)	ZE (0) 8

Swabs	***Legionella spp / L. pneumophila*** [2]	1 swab with 10 ml Ringer 1/40	1 swab with 10 ml Ringer 1/40. Sample size: 100 cm^2 typically acceptable	Recommended : **1 day** Maximum : **5 days**	**Cooling temperature** (6- 18 ºC)	**Cooling temperature** (6-18 ºC)	**Cooling temperature** (6-18 ºC)	ZE (0) 2
Swabs	***Norovirus and Hepatitis A Detection*** [2]	Moist swab in PBS	1 swab with 1-3 ml of PBS Sample size: 100 cm^2 typically acceptable	Freezing temperature: **6 months**	**Cooling temperature.** Freeze at your reception.	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Freezing: EQ-GEN-254

Contact plates	***Total Viable Count –TVC-*** [3]	Sampled plate + transport control (blank plate)	1 Rodac PCA plate with neutralizer per sample point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (30 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable
Contact plates	***Enterobacteriaceae*** [3]	Sampled plate + transport control (blank plate)	1 Rodac VRBG board per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (37 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable

Contact plates	***Molds and yeasts*** *(3)*	Sampled plate + transport control (blank plate)	1 Rodac Rose Bengal Chloramphenicol plate per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (25 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable
Environment plates: Sedimentation	***Total Viable Count -TVC-*** *(4)*	10 minutes	1 Rodac PCA plate per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (30 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable

Environment plates: Sedimentation	***Molds and yeasts*** *(4)*	10 minutes	1 Rodac Rose Bengal Chloramphenicol plate per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (25 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable
Environment plates: Impactation	***Total Viable Count -TVC-*** *(4)*	100 litres	1 Rodac PCA plate per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (30 ± 1) ºC according to the equipment assigned in ***PTV-MC-004***.	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable

Environment plates: Imp actation	***Molds and yeasts*** [4]	100 litres	1 Rodac Rose Bengal Chloramphenicol plate per sampling point	**8 hours** (recommended guideline)	**Room temperature** until arrival at the laboratory. Incubation at (25 ± 1) ºC according to the equipment assigned in ***PTV-MC-004.***	Not applicable (whole sample processed)	Not applicable (whole sample processed)	Not applicable

TYPE OF ANALYSIS: PHYTOPATHOLOGICAL

Matter	Determination	Minimum quantity required	Appropriate packaging type	Maximum period to start analysis from sampling	Transport conditions	Conservation conditions during analysis	Conservation time	Laboratory location
								Waiting area
Vegetal material	***Fungi, bacteria, nematodes virus (general)***	Small plants: Complete plants with incipient and initial symptoms. Large plants: Area with the presence of incipient symptoms or front of the advance of damages. Parts with high humidity (sprouts, fruits ...) wrapped in absorbent paper.	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are sent, avoid direct contact among them (for example, placing each subsample in an individual bag and the whole in a box).	**1 week**	**Room temperature,** under gentle conditions (10-25 ºC). Otherwise, **cooling temperature**.	**Room temperature,** under gentle conditions (10-25 ºC). Cooling temperature in case of perishable samples	Until the end of the analysis	ZE (0) 9 ZE 9

Vegetal material	***Mushrooms: Verticillium dahliae***	Branches 5-10 mm in diameter and 15-25 cm in length. With symptoms, but not completely dry.	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are shipped, avoid direct contact between them.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** in case of presence of symptoms that endanger the sample stability (rots)	Until the end of the analysis	ZE (0) 9 ZE9
Vegetal material	**Fungi: *Phytophthora spp***	Fine rootlets, digging several holes around the trunk of the affected plant (preferably from the root advance / drip line front). Keep with plenty of moist soil.	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are shipped, avoid direct contact between them.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** in case of presence of symptoms that endanger the sample stability (rots).	Until the end of the analysis	ZE (0) 9 ZE9

Vegetal material	***Bacteria: Xylella fastidiosa***	Branches / cuttings with attached leaves (containing 10 to 25 leaves, depending on size). Symptomatic plants: 4-5 pieces of branches of 30-50 cm. of medium-fine diameter and length and some piece of adult branch with darkening in the xylomatic or cambium regions (rings or half-moons with dark colorations). Asymptomatic plants: 4-10 young branches of the upper-middle part of the crown.	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are shipped, avoid direct contact between them.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** in case of presence of symptoms that endanger the sample stability (rots).	Until the end of the analysis	ZE (0) 9 ZE9
Plant material: Roots	**Nematodes**	20 g Roots and fine rootlets, digging several holes around the trunk of the affected plant (preferably from the root advance / drip line front). Keep with plenty of moist soil.	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are shipped, avoid direct contact between them.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** in case of presence of symptoms that endanger the sample stability (rots).	Until the end of the analysis	ZE (0) 9 ZE9

Vegetal material	***Bacteria: Clavibacter michiganensis***	Plants with decay symptoms	Watertight containers that avoid cross contamination and drying of the samples. If multiple zones or plants are shipped, avoid direct contact between them.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** in case of presence of symptoms endanger that endanger the sample stability (rots)	Until the end of the analysis	ZE (0) 9 ZE9
Plant Material : Seeds	***Fungi, bacteria and viruses***	***100 units***	Original container or closed aseptic container.	**1 week**	**Room temperature**	**Room temperature**	Until the end of the analysis	ZE 9
Soils and substrates	***Fungi, bacteria and nematodes***	500 g. Discard the first 5 cm of shallow soil. General: 20-40 cm deep. Lawn and meadows: 5 to 10 cm. Deep and fruity roots: 30-60 cm under the crown	Closed aseptic container.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature**, under soft ambient conditions. (10-25 ºC). **Cooling temperature** otherwise.	Until the end of the analysis	ZE (0) 9 ZE9
Waters	***Fungi, bacteria and nematodes***	500 ml	Closed aseptic container.	**1 week**	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	**Room temperature,** under mild environmental conditions (10-25 ºC). **Cooling temperature** otherwise.	Until the end of the analysis	ZE (0) 9 ZE9

TYPE OF ANALYSIS: PESTICIDES

Matrix	Determination	Minimum quantity required	Appropriate packaging type	Maximum period to start analysis from sampling	Transport conditions	Conservation conditions during analysis	Conservation time	Laboratory location
								Waiting area
Fresh plant material	***All included in the sample sets and determinations list, except dithiocarbamates***	200 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**2 days**	**Cooling temperature**	**Cooling temperature**	Fresh sample: **7 days** at cooling temperature. Prepared: **1 month** at freezing temperature.	ZE (0) 7
Fresh plant material and food	***Dithiocarbamate analysis***	1000 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**2 days**	**Cooling temperature**	**Cooling temperature**	Fresh sample: **7 days** at cooling temperature. Prepared: **1 month** at freezing temperature.	ZE (0) 7
Fresh plant material: Products of high unit value	***All included in the sample sets and determinations list***	Manager of Department will be consulted	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**2 days**	**Cooling temperature**	**Cooling temperature**	Fresh sample: **7 days** at cooling temperature. Prepared: **1 month** at freezing temperature.	ZE (0) 7

Foods	***All included in the sample sets and determinations list, except dithiocarbamates***	200 g	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**2 days**	**Cooling temperature**	**Cooling temperature**	Fresh sample: **7 days** at cooling temperature. Prepared: **1 month** at freezing temperature	ZE (0) 7
Chemicals and fertilizers	***All included in the sample sets and determinations list***	100 or 200g (preferably homogeneous)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**60 days** Room temperature	Z E 9
Phytosanitary products	***All included in the sample sets and determinations list***	20 g (preferably homogeneous)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**60 days** Room temperature	ZE9
Waters	***Volatile Organic Compounds***	100 ml	Watertight glass containers that avoid cross contamination, with a thiosulfate spatula and without headspace.	**1 day**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 7
	PAHs	1000 ml	Watertight glass containers that avoid cross contamination.	**2 days**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 7
	Pesticides	1000 ml	Watertight glass containers that avoid cross contamination.	**2 days**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 7

	All included in the sample sets and determinations list	1000 ml	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	**2 days**	**Cooling temperature**	**Cooling temperature**	**1 month** Cooling temperature	ZE (0) 7
Soils	***All included in the sample sets and determinations list***	1 or 2 kg (if it does not include coarse fraction)	Watertight containers that avoid cross contamination and do not provide any pollutants (bags, closed plastic or glass containers ...)	-	**Room temperature**	**Room temperature.** Places free of possible cross contaminations with particles from the environment, with other types of samples and / or pollutants.	**1 month** Room temperature	ZE7

TEMPERATURE CONDITIONS				
TYPE OF ANALYSIS	ACCEPTED TEMPERATURE RANGE			
	Room temperature	Cooling temperature	Cooling temperature Sample	Freezing temperature
Physicochemical	4-45 ºC	4-10 ºC	2-5 ºC	<-18 ºC
Pesticides	4-45 ºC	4-10 ºC	2-5 ºC	<-18 ºC
Microbiology	4-45 ºC	2-8 ºC	2-8 ºC	<-18 ºC

POST-ANALYSIS STORAGE AND DISPOSAL OF SAMPLES

TYPES OF ANALYSIS	MATTER	POST-ANALYSIS STORAGE CONDITIONS	POST-ANALYSIS STORAGE (according to Mapping)	DISPOSAL AREA	MAXIMUM PERIOD BEFORE DISPOSAL	DISPOSAL METHOD
A. PHYSICAL AND / OR-CHEMICAL (other than microbiological or pesticide)	Leaf, plant material	Cooling temperature (2-5 ° C)	AGMB1	Containers	Raw sample 1 month	Authorized manager
	Leaf, plant material	Room temperature	APA1	Containers	Prepared 1 month	Authorized manager
	Waters and aqueous solutions	Cooling temperature (2-5 ° C) Room temperature	AGMB2	Containers	Raw sample: 1 week in refrigeration or for the duration of the tests, 3 weeks Room temperature	Authorized manager
	Waters and aqueous solutions	Cooling temperature (2-5 ° C)	APA 2	Containers	Prepared : 1 week in refrigeration or for the duration of the tests, 3 weeks Room temperature	Authorized manager
	Soils (raw)	Room temperature	AGMB3	Containers	1 month	Authorized manager
	Floors (prepared)	Room temperature	APA3	Containers	1 month	Authorized manager
	Chemicals and fertilizers (solid and liquid)	Room temperature	APA4, APA5, APA6 AGMB 4, 5, 6	Containers	Raw solids 1 month Solids prepared 2 months Liquids 2 months	Authorized manager
	Foods	Room temperature, r efrigeración, freezing	A GMB 10 ZE (-0) 10	Containers	Raw sample 1 month Freezing 1 month	Authorized manager
	Sludge, sludge, materials to leach and others	Room temperature, r efrigeración	APA4, APA5, APA6 AGMB 4, 5, 3 Others consult Technical Director	Containers Others consult Technical Director	Raw sample 1 month Prepared 1 month Others consult Technical Director	Authorized manager
B . Microbiological and Phytopathology	All	Cooling temperature (2-8 ºC)	AGMB 8, 9	Microbiology containers	Until the end of the analysis	Authorized manager
C . PESTICIDES	All	Cooling temperature	ZE (0) 7	Containers	Raw sample 1 week	Authorized manager
	All	Freezing temperature	ZE (-0) 7	Containers	Processed 1 month	Authorized manager

Note	Comments
1	In the case of treated water, the disinfectant used must be neutralized at the time of sampling. For **FITOSOIL** sampling of chlorinated waters, the laboratory has aseptic commercial containers with thiosulfate. These bottles contain about 20 mg/litre and neutralize up to 5 ppm of free residual chlorine. For those samples treated with other disinfectants (especially in the case of analysis of *Legionella* in cooling towers, industrial facilities ...), the customer must proceed with its neutralization. The manufacturer of the disinfectant must indicate the neutralizer and the appropriate amount. In the registry of non-agricultural pesticides or biocides of the Ministry of health, Social Services and Equality you can obtain information about the authorized biocides, application procedure, incompatibilities, neutralizers, etc. (http : / /www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas, for consultation of those authorized for Legionella, enter the value "100" in the "Number" field). In the case of *Legionella*, in addition to the water sample, it may be necessary to scrape deposits and encrustations using a swab. See the guides edited by the Ministry for more detailed information on the sampling of facilities at risk of legionellosis (Technical Guidelines for the Prevention and Control of Legionellosis in facilities: http://www.msssi.gob.es/ciudadanos/saludAmbLaboral/agenBiologicos /guia.htm).
2	The laboratory reports the result in cfu/swab. Additionally, the report includes an informative table where these results are transformed to cfu/cm^2. In some cases, it is not possible to know the sampled surface (knives ...) or to sample the recommended surface. In this case, indicate to the laboratory the sample size or “unknown” to modify the expression of the results. For the fulfillment of a specific criterion, the sampling of a specific surface may be necessary. See point 3 “*NOTE REGARDING THE CHOICE OF SWABS OR CONTACT PLATES FOR SURFACE CONTROL* ” for more information .
3	*NOTE REGARDING THE CHOICE OF SWABS OR CONTACT PLATES FOR SURFACE CONTROL* Contact plates are generally recommended for contamination control on dry, smooth and clean surfaces, for count determinations, presenting a working range (of result expression) of 1-100 cfu/plate (one plate equivalent to approximately 25 cm^2, so they have an equivalent range of 0,04-4 cfu/cm^2). In general, they have greater recovery efficiency than swabs. Swabs can be used for any type of surface, and have a typical detection limit of 10 cfu / sampled surface. The presence of disinfectant residues on the sampled surfaces can influence the result obtained. **In order to sample and choose the appropriate material for your needs, it is always advisable to contact the laboratory in advance and communicate the type of surface to be sampled, the necessary determinations and the compliance requirements.**
4	Environmental microbiological sampling can be carried out by sedimentation or impaction, the latter being the method recommended by the laboratory. As indicated, the recommended volume of air to analyze is 100 litres. In the case of using another volume, indicate to the laboratory the volume analyzed to modify the emission of results.