

Matrix list for Aerobic Microorganisms

Matrix group	Category	Types (matrix)	Example of items
Milk & Dairy	Raw milk and dairy products	Raw milks and/or fermented/acidified milks (not heat treated)	Raw milk
	Heat-processed milk and dairy products	Pasteurized dairy products	Milk-based desserts, ice creams, drinks, creams
		Pasteurized milk-based products	Pasteurized milks
		Dry	Milk powders
		Dry	Powder for milk-based desserts
Meat	Raw meat and ready-to-cook meat products (except poultry)	Fresh meat (unprocessed)	Carcasses, meat cuts, Carpaccio's
			Minced meat, meat preparations, Carpaccio's
			Carcasses, swabs, rinsates
		Ready-to-cook (processed)	Frozen burger patties, marinated beef shish-kabobs
	Ready-to-eat, ready-to-reheat meat products	Cooked meat products	Cooked ham, pâté
		Fermented or dried meat products	Salami
		Raw cured (smoked) (aw > 0,92)	Filet de sax, lard
		Raw cured (smoked) (aw < 0,92)	Cobourg ham, dry cured ham
	Raw poultry and ready-to-cook poultry products	Fresh meats (unprocessed)	Carcasses, meats, cuts
		Fresh meats (unprocessed)	Carcasses, swabs, rinsates
		Fresh meats (unprocessed)	Minced meat, meat preparations
		Ready-to-cook products (processed)	Seasoned chicken breasts
	Ready-to-eat, ready-to-reheat meat poultry products	Cooked meat products	Cooked turkey filet
		Fermented or dried meat products	Chicken sausage
		Raw cured (smoked) (aw > 0,92)	Smoked turkey filet
Eggs	Eggs and egg products (derivates)	Eggs (unprocessed)	Shell eggs
		Egg products (heat processed) with additives (salt or sugar >2%)	Egg yolk, egg white, whole liquid egg
		Egg products (heat processed) without additives	Egg yolk, egg white, whole liquid egg

		Dry	Egg powder
Fish & Seafood	Raw and ready-to-cook fish and seafood (unprocessed)	Fish (unprocessed)	Fish
		Shellfish (unprocessed)	Oyster, clam, scallop, mussel
		Crustaceans (unprocessed)	Shrimp, crab and crab meat, lobster
	Ready-to-eat, ready-to-reheat fishery products	Cooked fishery products	Shelled and shucked products of cooked crustaceans, fish and seafood terrines
		Acidified and marinated fishery products	Roll herring, anchovy
		Smoked or cured, and other processed products ($a_w > 0,92$)	Smoked fish
		Smoked or cured, and other processed products ($a_w < 0,92$)	Smoked fish, dried (salted) fish
Vegetables	Fresh produce and fruits	Cut ready-to eat fruits	Fruit mixes
		Cut ready-to-eat vegetables	Bagged pre-cut leafy vegetables, salads, shredded carrot
		Sprouts	Soy, fenugreek, alfalfa, mung
		Raw fruit/vegetable juices (unpasteurized)	Freshly squeezed strawberry juice, smoothies, carrot juice
	Processed fruits and vegetables	Heat-processed fruit/vegetables juices	Pasteurized apple juice
		Heat processed vegetables and fruits	Blanched spinach, frozen vegetables blanched
		Fermented/acidified vegetables	Fermented cabbage, pickle
	Dried cereals, fruits, nuts, seeds and vegetables	Low and IMF fruits ($a_w < 0.85$)	Syrups, concentrates, jams, semi-dried prunes
		Seasonings	Spices, herbs, peppers
		Nuts and seeds	Nuts, nut meats, nut butters, seeds
		Dried fruits and vegetables ($a_w < 0.60$)	Freeze-dried vegetables
		Dried cereals	Corn, oat, breakfast cereals
		Flours	Wheat, buckwheat, oat
		Probiotic ingredients	Pre-blend, spray dried, culture powders (probiotics)
Infant formula and infant cereals	Infant formula and infant cereals	Non-probiotic ingredients	Dehydrated milk, dehydrated yoghurt, dehydrated berries
		Non-probiotic infant formula	Whey-based (dairy), soy-based (vegetables) fortification formulation
		Probiotic infant formula	Whey-based (dairy), soy-based (vegetables) fortification formulation

		Non-probiotic infant cereals	Infant cereals
		Probiotic infant cereals	Probiotic infant cereals
Chocolate, bakery products and confectionary	Chocolate, bakery products and confectionary	Pastries	Bakery products with custard, confectionaries
		Dry powered	Cake mixes
		Low moisture	Crackers, breads, cookies
		Dry & sugared low moisture (aw <0.85)	Cake, pralines, marzipan
		Dry & sugared low moisture (aw <0.65)	Biscuits, chocolate, confectionary, honey, sugar, candy syrups
Multi-component foods	Multi-component foods or meal Components	Composite processed foods (cooked)	Hot meals
		Ready to (re)heat food: refrigerated	Cooked chilled foods, boiled rice or pasta, vol-au-vent in vacuum
		Ready to (re)heat food: frozen	Frozen fries, pizza, stuffed croissants
		Ready to (re)heat food: ambient stable (canned)	Vol-au-vent in glass bottles
		Mayonnaise based delisalads (acid) with raw ingredients	Raw vegetable salads with dressing
		Mayonnaise based delisalads (acid) with processed ingredients	Sandwich spreads
		Ambient stable acid foods (pH < 4,8)	Ketchup, sauces, dressings, mayonnaises, mustard
Feed	Pet food and animal feed	Animal origin ingredients	Meat and bone meal, chicken and feather meal, fish meal, animal digest
		Plant origin ingredients	Com meal, soybean meal, vegetables
		Other ingredients	Microbial products such as yeast extracts, probiotics
		Dry food (aw ≤0,7)	Pellets, treats
		Wet food (aw > 0,7)	Fresh meat, sausages, croquettes
		Animal feeds (bovine, ovine, pig)	Cereals, flours
		Animal feeds (poultry)	Cereals, flours
		Animal feeds (fish)	Cereals, flours
Environmental samples	Environmental samples (food or feed production)	Equipment or production environment	Swabs, dusts
		Waters used in manufacturing process	(Recycled) washing water, process water