Edible Caseinates Standard

Product Definition

Edible Caseinates are the milk products obtained by separating, washing, and drying the coagulum of previously pasteurized skimmed milk and/or other products obtained from milk, where that coagulum is the result of acid precipitation and where that coagulum has been neutralized by the addition of an alkaline agent prior to drying. Edible Caseinates comply with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

Composition

Parameter	Units of Measure	Limits
Milk protein	% w/w, dry basis	90.0 minimum
Milkfat	%	2.0 maximum
Total moisture	% w/w	6.0 maximum
Lactose	% w/w	1.0 maximum
pH	-	8.0 maximum

Other Characteristics

Physico-chemical Properties		
Parameter	**Units of Measure**	**Limits**
Scorched particles	mg/25g	15.0 maximum
Color	visual	white to cream colored
Flavor and odor	sensory	bland natural flavor and odor and free from offensive flavors and odors
Physical appearance	visual	free of lumps that do not break up under slight pressure; free of foreign material

Microbiological Analysis		
Parameter	**Units of Measure**	**Limits**
Standard plate count	CFU/g	30,000 maximum
Yeast and mold	CFU/g	100 maximum
Coliforms[1]	CFU/g	10 maximum
Enterobacteriaceae[1]	CFU/g	10 maximum

Microbiological Analysis		
Parameter	**Units of Measure**	**Limits**
Salmonella	CFU/100g	not detected
Staphylococcus (coagulase positive)	CFU/g	not detected

1 - The food industry is trending toward *Enterobacteriaceae* ("EB") as the most commonly used category of indicator organisms for gauging general process sanitation. For compliance to this Standard, either coliforms and/or EB shall be utilized, at the discretion of the manufacturer.

Methods of Analysis

Parameter	Reference Method
Protein	AOAC 991.20 (N x 6.38)
Milkfat	AOAC 989.05
Moisture	AOAC 925.45
Lactose	AOAC 984.15
Scorched particles	ISO 5739
pH	USDA
Heavy metals	FCC
Microbiological tests	AOAC

Permissible Additives

Edible Caseinates must be neutralized with an appropriate alkaline reagent; commonly used examples include calcium hydroxide, potassium hydroxide, sodium hydroxide, sodium carbonate, and ammonium hydroxide. Any neutralizing agent used for this purpose shall be food grade and shall be used in accordance with U.S. current Good Manufacturing Practices and in accordance with its GRAS status, where applicable.

Product Labeling

Recommended identification: Edible _____ Caseinate

where the cation contributed by the neutralizing agent is stated (e.g., calcium, potassium, sodium, ammonium)

Typical Applications

Edible Caseinates are suitable for non-dairy coffee creamers, whipped toppings, dairy blends, nutritional products, baked goods, protein fortification, and other applications.

Typical Storage & Shipping

Product should be stored, shipped, and utilized according to the manufacturer's established recommendations. As guidance, product should be stored and shipped in a cool, dry environment with temperature below 80°F and relative humidity below 65%. Stocks should be rotated and should utilized in accordance with the manufacturer's established date of expiration or retest.

Typical Packaging

Multiwall kraft bags with polyolefin inner liner, or other suitable closed containers (e.g., totes) are typical.

Revision History

Version	Effective Date	Notes
1.0	02/22/2024	First officially approved version of this new ingredient standard.