



Edible Acid Casein Standard

Product Definition

Edible Acid Casein is the milk product obtained by separating, washing, and drying the acid-precipitated coagulum of previously pasteurized skimmed milk and/or other products obtained from milk. Edible Acid Casein complies 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
Casein proportion of milk protein	% w/w, dry basis	95.0 minimum
Milkfat	%	2.0 maximum
Total moisture	% w/w	12.0 maximum
Ash (phosphated)	% w/w	2.5 maximum
Lactose	% w/w	1.0 maximum
Titrateable acidity	mL 0.1 N NaOH/g	0.27 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
<i>Enterobacteriaceae</i> ¹	CFU/g	10 maximum
<i>Salmonella</i>	CFU/100g	not detected
<i>Staphylococcus</i> (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
Ash	AOAC 942.05
Lactose	AOAC 984.15
Titrateable acidity	SMEDP
Scorched particles	ISO 5739
pH	USDA
Heavy metals	FCC
Microbiological tests	AOAC

Product Labeling

Recommended identification: Edible Acid Casein

Typical Applications

Edible Acid Casein is suitable for cheese production, dairy blends, nutritional products, 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 be 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	09/08/2023	First officially approved version of this new ingredient standard.
2.0	07/10/2024	Increased the limit for yeast and mold from 50 CFU/g to 100 CFU/g. Changed the citation for microbiological methods from FDA BAM to AOAC. Struck the information about typical mesh sizes. Struck the requirements for copper, lead, and iron. All changes made in order to align with the ADPI Ingredient Standards for Edible Rennet Casein and Edible Caseinates, both of which were drafted and approved after the implementation of this Standard, and both of which are consistent with all of these revised testing details.