KEEP INGREDIENTS CO., LTD.

No. 2019, Unit 1, Building 10, Yuexiucheng Phase 1, Guodu Xuefu Street, Chang'an District, Xi'an, Shaanxi, 710119, China

TECHNICAL DATA SHEET

Bovine Colostrum Powder, IgG 20%

1. PRODUCT DESCRIPTION

Bovine colostrum powder is produced from the first milking secretion (colostrum) of healthy cows (Bos taurus) after normal calving, through heat treatment, centrifugal defatting and low-temperature drying, and standardized to an immunoglobulin (IgG) content of not less than 20.0%. The product is a pale yellow or milky yellow powder or fine crystalline form, with the peculiar odour and milk fragrance of bovine colostrum.

2. PRODUCT INFORMATION

Product name	Bovine Colostrum Powder
Source	Bovine (cow) colostrum
Composition	100% bovine colostrum
Available grade	IgG ≥ 20.0%
Country of origin	China
Supplier	KEEP INGREDIENTS CO., LTD., Xi'an, Shaanxi, China
Shelf life	24 months in the original sealed packaging

3. PRODUCT SPECIFICATION

Sensory specification

Item	Specification	Method
Colour and lustre	Uniformly light yellow or milky yellow	Visual
Taste and smell	Characteristic fishy odour and milk flavour of bovine colostrum	Sensory
State of organization	Uniform powder or fine crystal; no caking, no visible impurities	Visual

Physical and chemical specification

Item	Specification	Method
Protein, %	≥ 40.0	GB 5009.5-2016
Immunoglobulin IgG, %	≥ 20.0	GB/T 5009.194-2003
Fat, %	≤ 5.0	GB 5009.6-2016
Moisture, %	≤ 5.0	GB 5009.3-2016
Titratable acidity, °T	≤ 50.0	GB 5009.239-2016
Lead (Pb), mg/kg	≤ 0.5	GB 5009.12-2017
Arsenic (As), mg/kg	≤ 0.5	GB 5009.11-2014
Copper (Cu), mg/kg	≤ 10.0	GB 5009.13-2017
Chromium (Cr), mg/kg	≤ 2.0	GB 5009.123-2023
Nitrate ($NaNO_3$), mg/kg	≤ 100	GB 5009.33-2016
Nitrite ($NaNO_2$), mg/kg	≤ 2.0	GB 5009.33-2016

Hygiene specification

Item	Specification	Method
Aflatoxin M1, μg/kg	≤ 5.0	GB 5009.24-2016
Total plate count, CFU/g	≤ 30000	GB 4789.2-2016
Coliform, MPN/100 g	≤ 90	GB 4789.3-2016
Yeast and mold, CFU/g	≤ 50	GB 4789.15-2016
Melamine, mg/kg	≤ 2.5	GB/T 22388-2008
Staphylococcus aureus, per 25 g	Not detected	GB 4789.10-2016
Salmonella, per 25 g	Not detected	GB 4789.4-2024
Shigella, per 25 g	Not detected	GB 4789.5-2012
β-hemolytic streptococcus, per 25 g	Not detected	GB 4789.11-2014

4. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Reference
Appearance	Pale yellow or milky yellow powder or fine crystal	SDS
Odour	Characteristic odour and milk fragrance of bovine colostrum	SDS
pH (1% solution)	6.2	SDS
Water solubility	Soluble in water	SDS
Flammability	Non-ignitable	SDS

5. CERTIFICATE OF ANALYSIS

The following results are transcribed from the supplied certificate of analysis.

Product name	Bovine Colostrum Powder
Batch No.	KYBCP2026060201
Source	Bovine (cow) colostrum
Grade (IgG)	20%
Manufacturing date	2026-06-02
Analysis date	2026-06-08
Quantity	200.0 kg
Expiry date	2028-06-01
Packing	25 kg/bag/drum
Reference standard	RHB 602

Item	Specification	Result	Test method
Sensory analysis			
Colour and lustre	Uniformly light yellow or milky yellow	Uniformly light yellow or milky yellow	Visual
Taste and smell	Characteristic milk flavour of bovine	Characteristic beige and milk flavour of bovine	Sensory

	colostrum	colostrum	
State of organization	Uniform powder or fine crystal; no caking, no visible impurities	Uniform powder or fine crystal; no caking, no visible impurities	Visual
Physical and chemical analysis			
Protein, %	≥ 40	53.5	GB 5009.5, The first method
Immunoglobulin IgG, %	≥ 20	20.7	GB/T 5009.194
Fat, %	≤ 5.0	0.975	GB 5009.6, The third method
Moisture, %	≤ 5.0	3.09	GB 5009.3, The first method
Titratable acidity, °T	≤ 50	18.9	GB 5009.239, The first method
Lead (Pb), mg/kg	< 0.2	< 0.02	GB 5009.12, The first method
Arsenic (As), mg/kg	≤ 0.5	< 0.01	GB 5009.11, The first method
Chromium (Cr), mg/kg	≤ 2.0	< 0.01	GB 5009.123
Nitrate ($NaNO_3$), mg/kg	≤ 100	4.85	GB 5009.33, The second method
Nitrite ($NaNO_2$), mg/kg	≤ 2	< 0.3	GB 5009.33, The second method
Aflatoxin M1, μg/kg	≤ 5.0	< 0.10	GB 5009.24, The third method
Melamine, mg/kg	≤ 2.5	< 2.0	GB/T 22388, The first method
Microbiological			
Total plate count, CFU/g	≤ 30000	2700	GB 4789.2
Coliform, MPN/100 g	≤ 90	< 30	GB/T 4789.3-2003
Yeast and mold, CFU/g	≤ 50	< 10	GB 4789.15, The first method
Staphylococcus aureus, per 25 g	Not detected	Not detected/25 g	GB 4789.10, The first method
Salmonella, per 25 g	Not detected	Not detected/25 g	GB 4789.4
Shigella, per 25 g	Not detected	Not detected/25 g	GB 4789.5
β-hemolytic streptococcus, per 25 g	Not detected	Not detected/25 g	GB 4789.11

6. COMPOSITION

No.	Ingredient	Content
1	Bovine colostrum	100%

7. STATEMENTS AND COMPLIANCE

- **Allergen:** The product contains milk and products thereof, because it is bovine colostrum, a milk derivative; lactose may be present. None of the other substances listed in Annex II to Regulation (EU) No 1169/2011 (gluten-containing cereals, crustaceans, eggs, fish, peanuts, soybeans, tree nuts, celery, mustard, sesame, sulphur dioxide/sulphites, lupin, molluscs) is used as a raw material, carrier or processing aid in its manufacture.
- **BSE/TSE free:** The product is manufactured from bovine colostrum, the first milking secretion of healthy cows (Bos taurus) collected after normal calving. It does not contain, and is not derived from, any specified risk material (SRM) as defined in Regulation (EC) No 999/2001, nor from meat-and-bone meal, greaves or any other ruminant-derived by-product; no bovine-derived tallow, gelatine, bone char or animal enzyme is added during processing.
- **Animal origin:** The product is of animal origin. The only source species is cattle (Bos taurus); the raw material is bovine colostrum (a milk secretion). No raw material, carrier or processing aid from any other animal species is used; the product is not a synthetic or plant-derived material and is not blended with plant protein.
- **Country of origin:** The product originates from China.
- **Halal:** HALAL certificate No. HKBCL-CH.24/105 (IFRC Hong Kong), valid through 2027-12-11.
- **Safety and handling:** Per the supplied Material Safety Data Sheet, the product has no GHS hazard classification and contains no hazardous components; it is stable under recommended storage and handling conditions, with no dangerous reactions or hazardous decomposition products. It is not classified as a hazardous/dangerous material under IATA, IMDG or DOT regulations.

8. STORAGE AND TRANSPORTATION

- **Application:** Raw material for food and food supplements.
- **Shelf life:** 24 months in the original sealed packaging.
- **Storage:** Store in a cool and dry area, sealed and protected from moisture, sunlight and high temperature; keep away from strong oxidizing agents, acids and alkalis.
- **Packing:** 4 kg/bag × 2 bags/carton; 25 kg/bag/drum.
- **Transport:** Not classified as hazardous for transport; protect the product from sunlight and rain during transport.

The specifications above are long-term product specification; batch test results are stated in the relevant Certificate of Analysis.