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# Purchasing Specification Raw Material

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Valid from: Valid to:

### Milk Cow Skimmed Powder Low Heat Low Spores

Status: Approved INTERNAL USE ONLY

Reason for new version	Modified
reason for new version	Modified:
	Identifier and general description
	Quality statement
	Intended use
	Antibiotic requirements
	Microbiological requirement comments to relevant ISO methods
	Microbiological requirements aerobic mesophilic microorganisms
	Order of packaging requirement statements
	Added:
	Composition
	Crude proteins
	Whey protein nitrogen and solubility index - comments added
	Scorched particles
	Foreign materials
	Impurities
	Melamine
	Cyanuric acid
	Aflatoxin comment
	Deleted:
	Certificate requirements
	Dirt test
	Radioactivity
	Pesticides
	Chloramphenicol
	Aerobic spores, thermophilic
	Label identification
Specification author:	Peter ALEXANDER

#### **GENERAL DESCRIPTION**

Skimmed milk powder, dried by atomization, must be derived from cows' milk.

#### **GENERAL REQUIREMENTS**

### **Quality and Legislation:**

The raw material shall comply with applicable laws and regulations in the country of its destination or Codex Alimentarius, whichever is stricter, unless otherwise specified. If the purchaser has determined specific limits for its own needs, the strictest of the three shall apply.

Quality	Food grade	
	The raw material must not contain any	
	substances, materials or biological agents in	
	amounts which may represent a risk to consumer	
	health.	

### **INTENDED USE**

Relevant process	Used in products submitted to a heat treatment sufficient to inactivate pathogens Used in confectionary products	
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Not for use in Infant or Healthcare Nutrition

### **COMPOSITION**

Milk Skimmed Powder.

### SENSORY REQUIREMENTS

Appearance as is	Absence of lumps, with the exception of those which crumble easily  White in color without scorched particles	
Color as is		
Taste as is	Must be pure, i.e. neither tallowy, nor stale, nor of caramel and must not have any other abnormal taste deviations. The taste must also be controlled in a 10% reconstitution.	

### PHYSICAL-CHEMICAL REQUIREMENTS

In addition to the limits set by local legislation or Codex Alimentarius, Nestlé has determined specific limits for its own needs. Where applicable these are listed below.

### **Quantitative and Qualitative Requirements:**

Parameter	Minimum	Maximum	Target	Comments
Moisture		4 g/100g		Oven method
Acidity		0.15 %(m)		ADPI, as lactic acid
Crude proteins	34 g/100g			Total Nitrogen x 6.38, on solid non-fat
Whey protein nitrogen, undenaturated	6.00 mg/g			WPNI according to ADPI
Fat content		1.25 g/100g		
Solubility index		1.25 ml		ADPI

Scorched particles	Max. disk B (scorched particles ADPI in 25 g)	· · · · · · · · · · · · · · · · · · ·
Foreign material	Free from (state of the art)	
Impurities	Free from (state of the art)	

### **CONTAMINANTS/ADDITIVES**

In addition to the limits set by local legislation or Codex Alimentarius, Nestlé has determined specific limits for its own needs. Where applicable these are listed below.

Parameter	Minimum	Maximum	Requirement	Comments
Additives			Absent	

Antibiotics		MRLs (maximum residue limits) according to regulations, or non-detectable by reference method for non-authorized antibiotics
Melamine	2.5 mg/kg	
Cyanuric acid	2.5 mg/kg	
Aflatoxin M1	4 μg/kg	The indicated limit is based on Codex norm for liquid milk. Local legislation, which can be stricter, has to be respected.

### **MICROBIOLOGICAL REQUIREMENTS**

In addition to the limits set by local legislation or Codex Alimentarius, Nestlé has determined specific limits for its own needs. Where applicable these are listed below. The expression of microbiological quality criteria is based upon that recommended by "The International Commission on Microbiological Specification for Foods" where:

n = Number of samples

c = Maximum number of samples greater than or equal to m and less than M

m = Microbiological limit that:

- in a 2 class plan separates good from defective quality;
- in a 3 class plan separates good from marginally acceptable quality.

M = Microbiological limit that:

- in a 3 class plan separates marginally acceptable from unacceptable quality;
- in a 2 class plan M may be assimilated to m.

#### **Contaminant Microorganisms:**

Parameter	n	C	m	M	Comments
Aerobic mesophilic microorganisms	2	0	10,000 /g		ISO 4833
Aerobic spores, thermophilic	2	0	100 /g		100 °C, 30 min
Salmonella	10	0	0 /25g		ISO 6579 Max. pooling 200 g per examination
Enterobacteriaceae	2	0	10 /g		ISO 21528

## PACKAGING, STORAGE & TRANSPORTATION

In addition to the limits set by local legislation or Codex Alimentarius, Nestlé has determined specific limits for its own needs. Where applicable these are listed below.

Parameter	Requirement	Comment
Packaging	Use only contact packaging materials approved for food use in the country of destination impervious to moisture impervious to light impervious to air	- Communic

Minimum shelf life from manufacturing date	Storage conditions	Comment
	in a dry place	
	At ambient temperature	

### **ANALYTICAL METHODS**

Analytical methods	Analytical methods are available on	
	request	