

# Skim milk powder

Skim milk powder is used as nutritive substrate in media for the growth of fastidious lactobacilli and in bacteriological media for dairy products

## Mode of Action

Skim milk powder is a spray dried skimmed cow milk that is free of inhibitors (e.g. antibiotics).

It is used as substrate in media for the bacteriological examination of dairy products and for the identification of *Clostridia* spp. The latter can be differentiated based on their ability to proteolytically break down proteins to peptones (peptonisation) or to coagulate milk.

As an ingredient in culture media Skim milk powder is usually employed in concentrations of 0.1 to 1.0%.

## Typical Analysis

Colour powder	Cream
Bioburden	<10000 cfu/g
Solubility (5%)	Total
pH (2% in water)	6.0-7.0
Water (Karl Fischer)	≤10%
Sulfated ash (800 °C)	≤10%
Assay protein (ex. N calc. on dried substance)	≥35%
Fat	≤1.5%
Free acids (as lactic acid)	≤2%
Lactose	50-55%
Amino acid specification	See table page 542

## Ordering Information

Product	Merck Cat. No.	Pack size
Skim milk powder	1.15363.0500	500 g

## Quality control

Test strains	Growth
<i>Staphylococcus aureus</i> ATCC 25923	+
<i>Staphylococcus aureus</i> ATCC 6538P	+
<i>Enterococcus faecalis</i> ATCC 11700	+
<i>Listeria monocytogenes</i> ATCC 19113	+
<i>Escherichia coli</i> ATCC 8739	+
<i>Klebsiella pneumoniae</i> ATCC 13883	+
<i>Salmonella typhimurium</i> ATCC 14028	+