



IS 1165:2022 Whole Milk Powder — Specification

Milk production in our country is characterized by seasonal variations and drying of milk, an important method of preservation, facilitates later consumption during the lean season. The **dried milk** products, thus, have become an essential part of the chain between the producer and the consumer. However, drying of milk can prove detrimental to its **nutritive value**, particularly its protein quality and **overheating** may lead to burnt flavour in the product. While being a dry product enhances its **shelf life**, the correct **packaging** and **storage** conditions are crucial to maintain quality over time.

The Indian Standard, IS **1165:2022**, specifies requirements for the **whole milk powder**, including its **production, quality, and packaging** under **hygienic** conditions. This standard aims to ensure uniformity and safety by setting clear guidelines for the properties and testing of whole milk powder. Key specifications include a minimum of 26% **milk fat** and 34% **milk protein** in non-fat solids. The powder shall be free from **contaminants** like extraneous matter, vegetable fats, and added sweeteners. Moisture levels are restricted to 4% to ensure stability, while **microbiological safety** limits for 9 critical requirements are defined to control **bacteria, yeast, mold, and pathogens**. Additionally, limits for **heavy metals** like lead and arsenic, toxins like aflatoxin M1, and other contaminants like melamine are specified to mitigate **health risks**. Requirement of **insolubility index** is also stated in the standard that relate to its correct processing and storage.

Packaging clause mentions requirements for retail as well as bulk packing in **airtight, food-grade containers** to preserve **quality** and prevent contamination, with mandatory labeling indicating product name, manufacturer, expiry date etc. **Testing** and sampling procedures are detailed for consistency and compliance, ensuring that products meet both **nutritional** and **safety** standards.

This sixth revision harmonizes the IS with the **Food Safety and Standards** (Food Products Standards and Food Additives) Regulations, 2011, ensuring alignment with food safety laws.