

# Instant Nonfat Dry Milk (INDM)

## Production Definition

Instant Nonfat Dry Milk is nonfat dry milk which has been produced in a manner to substantially improve its dispersing and reconstitution characteristics. If lactose is used as a processing aid, the amount shall be only that necessary to produce the desired effect – not to exceed 2.0% of the weight of the nonfat dry milk. INDM is fortified with Vitamins A and D. The vitamins are added to ensure that each quart of the reconstituted product contains 2000 I.U. of Vitamin A and 400 I.U. of Vitamin D, when prepared according to label directions. While most INDM is used for beverage purposes, INDM which has not been fortified with vitamins may be procured for use as an ingredient in other food products. INDM for human consumption complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

### Typical Compositional Range<sup>1</sup>

	<i>Percentage</i>
Protein.....	34.0 – 37.0
Lactose.....	49.5 – 52.0
Fat <sup>2</sup> .....	0.6 – 1.25
Ash.....	8.2 – 8.6
Moisture <sup>2</sup> .....	3.5 – 4.5

### Microbiological Analysis

Standard Plate Count <sup>2</sup> .....	≤ 10,000/g
Coliform <sup>2</sup> .....	≤ 10/g
Salmonella.....	negative
Listeria.....	negative
Coagulase-positive Staphylococci.....	negative

## Other Characteristics

Scorched Particle Content <sup>2</sup> .....	7.5 – 15.0 mg
Solubility Index <sup>2</sup> .....	≤ 1.0 ml
Titratable Acidity <sup>2</sup> .....	≤ 0.15%
Dispersibility <sup>2</sup> .....	≥ 85.0%
Color <sup>2</sup> .....	white to light cream/natural color
Flavor <sup>2</sup> .....	sweet, pleasing and desirable

## Ingredient Statement

‘Instant Nonfat Dry Milk fortified with Vitamins A & D’ or ‘Instant Nonfat Dry Milk fortified with Vitamins A & D (\_\_\_\_\_ % milkfat)’ if the fat content is over 1.5%.

## Production Applications and Functionality

Beverages, breads, soups, salad dressings, entrees, desserts, diet drinks (special dietary beverages), infant formulas, cosmetics

## To Reconstitute INDM

INDM	+	cold water	=	Liquid Instant Milk
1/3 cup	+	1 cup	=	about 1 cup
1 1/3 cups	+	3 3/4 cups	=	about 1 quart

## Storage & Shipping

Keep in a cool, dry place. Unopened packages of INDM can be kept for 6 months to 1 year without refrigeration. Some flavor change may occur if storage and shipping temperatures reach 90°F or above for long periods of time. Refrigerate after mixing with water. The same care should be given to reconstituted dry milk as is given to other fluid milk products.

## Packaging

Usually packaged for retail sales in multi-quart bulk packages or individual pre-measured envelopes. Also packaged in multiwall kraft bags and bulk containers.

<sup>1</sup> On an ‘as is’ basis

<sup>2</sup> USDA Grade parameters (7 CFR §58.2753)