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USP-1 ZINC OXIDE

DESCRIPTION

USP-1 is of highest quality and purity. It is specially produced to comply with the high purity requirements of the United States Pharmacopeia, the FDA, and the Board of Standards of the Toilet Goods Association. Made from high-purity zinc metal under carefully controlled conditions, USP-1 provides the unusual combination of highest purity, highest chemical reactivity, and lowest opacity.

USES

COSMETICS – USP-1 is utilized in such cosmetics as face powder, baby powders, nursery powders, sunburn preventatives, and rouge sticks to furnish high opacity to ultraviolet light and mild deodorant properties.

PHARMACEUTICALS – Zinc oxide is widely used in dermatological applications in the form of ointments and lotions as it is protective, astringent, and non-toxic. USP-1 zinc oxide is often used in the following preparations described in the U.S. Pharmacopeia: calamine lotion, phenolated calamine lotion, coal tar ointment, zinc gelatin, zinc oxide ointment, and zinc oxide paste. Likewise, it is the base of zinc oxide paste with salicylic acid as described in The National Formulary.

CAN LACQUERS – USP-1 is especially produced to meet the high purity requirements of food can manufacturers for use in can sealing compounds and in organic coatings applied to the interior of cans. In coatings on the interior of cans for packing meats, fish, and other protein-containing foods, the high reactivity of USP-1 converts soluble sulfides into white zinc sulfide. This prevents the formation of black tin and iron sulfides that discolor foods and interiors of containers.

TECHNICAL DATA

Representative Physical Properties

Mean Particle Size, m	0.12
Surface Area, m ² /g	9.0
Through 325 Mesh, %	99.99
Apparent Density, lb/ft ³	30
Specifications	U.S.Pharmacopeia 26 FDA 21 CFR 73.1991

Representative Chemical Properties

ZnO, %	99.9
PbO, %	0.001
CdO, %	0.001
As ₂ O ₃ , %	<0.00003
Total S as SO ₃ , %	0.001
H ₂ O Soluble Salts, %	0.02
Loss at 110°C, %	0.04
Insoluble in HCl, %	<0.01

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