

NANO ZINC OXIDE

ELIMINATES 99.99% BACTERIA, VIRUSES AND FUNGI WITH LONG LASTING EFFECTS.

Function: This nanostructured and functionalized zinc oxide is 100% effective as a long-acting sanitizer, its active ingredients are resistant to UV radiation and temperatures from freezing to 200 ° C, so it can be used in industrial processes to manufacture biocidal permanent effect coatings used indoors. and outdoors. Eliminates up to 99.9% of various pathogens, including SARS-CoV-2*.

Security: The functionalized zinc oxide nanoparticles measure > 100 nm, well above the minimum safety range recommended by annex VI of the cosmetic regulation (EC) No 1223/2009 of the European Parliament.

Environmental Impact: All ingredients come from natural minerals and were not tested on animals. All ingredients are food grade and approved by FDA.

First aid measures: In case of irritation or in contact with the eyes, rinse with plenty of water. In case of ingestion induce vomiting. In case of complications call a doctor.

Shelf Life: The expiration of the material is defined in 12 months for reevaluation, the storage conditions of the material are not limited, however, it is recommended to store at room temperature and indoors to prolong its expiration.

Recommendations: This zinc oxide has a high-density, so it is recommended that in products formulated with low viscosity, the container be shaken vigorously before use or formulated with thickening agents.

*SARS CoV-2 tests done according to the ASTM E1052-20 standards, using local government (INDRE) approved strains code DGE-DDYR-DSAT-05143-2020.

Table 1 Physical-Chemical characteristics

Visual Appearance	Cloudy white liquid
Total solids %	60 +/- 1
Excipient (water) cbp 100 (%)	40 +/- 1
pH	7.5 +/- 0.5
Density (g/cc)	2 +/- 0.1
Averaged particle size (nm)	140 - 200
Minimum Inhibitory Concentration (ppm)	> 8

Table 2 Dilution rates

Presentation of the final product	Recommended dilution ratios (in weigh)	Examples of concentrate parts/product parts
Disinfectant gel Ready-to-use products	1:1000	(1 g ZnO + /Kg Gel)
Floor and Surface cleaners*	1:100	(10 g ZnO + / Kg sanitizer)

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