

Updated: 11/2/2018

## Zinc Oxide USP

### Specification Sheet

**Description:** Produced from naturally occurring zinc ore, super pure (free from other metals). Particle size 200-1000 nanometer (nm) or 0.2-1 micrometer ( $\mu\text{m}$ ). White powder, odorless. Insoluble but dispersible in water and oils.

**CAS:** 1314-13-2

**INCI Name:** Zinc oxide

**Properties:**

- USP grade
- Reflects sunlight (UVB rays)
- Has soothing effects and can be used for skin irritations
- Whitening effect on skin therefore also used as coverage for makeup products

**Use:** Can be added to formulas as is, recommended concentration 5-25%. Maximum allowed: USA 25%, Japan no limit. Can be combined with other sun screens & pigments. For external use only.

**Applications:** Sun care & after-sun products, protective & soothing skin care products, diaper creams, mineral makeup.

**Country of Origin:** Canada

**Raw material source:** Metallic zinc

**Manufacture:** Zinc oxide is produced from metallic zinc which is melted in a graphite crucible and vaporized at high temperatures (around 1000°C). Zinc vapor reacts then with the oxygen in the air to give zinc oxide.

**Animal Testing:** Not animal tested

**GMO:** GMO free (does not contain plant-derived components)

**Vegan:** Does not contain animal-derived components

**Regulatory Information:** Sunscreens are registered as API (Active Pharmaceutical Ingredient) or OTC-drug with the FDA. This means that, if you want to sell products containing a sunscreen, your facility must be registered with the FDA and operate under cGMP guidelines. Further information about the FDA regulation of sunscreens can be found [here](#).