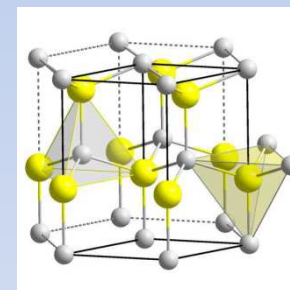


OSSIDO DI ZINCO

- **General Information**

- Substance identification**

- **INCI NAME:** Zinc oxide ZnO
 - **Chemical name:** Zinc oxide CI 77947; CI pigment white 4
 - **EC Number :** 215-222-5
 - **CAS Number:** 1314-13-2
 - **Molecular weight:** 81.38 g/mol.
 - **IUPAC Name:** Disodium dihydrogen ethylenediaminetetraacetate



OSSIDO DI ZINCO

Dati chimico fisici

- Physical form : solid
- Color: white
- Odour: odourless
- Purity: > 99%
- Melting point 248°C (DECOMPOSES)
- Boiling point: not applicable
- Vapour pressure: not applicable
- Water solubility:
 - Solubility: insoluble in organic solvents, therefore also possessing negative partition coefficients (log K_{ow}s).
 - Incompatible with strong oxidizing agents.
 - Bioaccumulative: Not Bioaccumulative
 - Persistent : Not Persistent

OSSIDO DI ZINCO

End point	Test	Dose	Result
<i>Toxicokinetics, Metabolism and Distribution</i>	Dermal absorption	n.s.	Poorly adsorbed, 95% eliminated via the kidneys, not found in the blood, found at 0,001% in the urine.
	Oral absorption		Poorly adsorbed, Expected due to electrolyte structure
<i>Oral Acute Toxicity</i>	Comparable to OECD 401 del 1973	2500/3200/4000/5000/6400 mg/Kg bW on 5 rats (5 male and 5 female)	Letal dose 2800 mg/kg

End point	Test	Dose	Result
<i>Inhalation Acute Toxicity</i>	OECD 412 GLP	30/300/1000 mg/m ³ for 5 days on 10 male rats	1103 mg/m ³ for 6 h/day LOAEC = 30 mg/m ³
<i>Skin Irritation</i>	Comparable to OECD 404 del 1973	2 ml sol. Water 50% on dorsal skin of 2 rabbits for 1/5/15 min. duration 20 h; on ear duration 20 h	1/5/15 min: not irritant 20 h: light erythema reversible NOT IRRITANT
<i>Ocular Irritation</i>	Comparable to OECD 405 del 1973	50 mg on eye of 2 rabbits for 8 days	Reversible redness NOT IRRITANT
<i>Sensitisation</i>	OECD 406 del 2000	Studies on 10 Guinea pigs : intradermal 0,5% in corn oil Topical in 30% corn oil	NOT SKIN SENSITIZER

Endpoint	Test	Dose	Result
<i>Repeated-dose Toxicity Oral</i>	Test 1970 no GLP and 1977 Read across	On male rats at 1/5/10 % of diet for 13 weeks	NOAEL > 500 mg /Kg bw/day Some adverse effects are evident at 5%.
<i>Repeated-dose Toxicity Inhalation</i>	OECD 412 del 2010 GLP	On male rats at 30/300/1000 mg/m ³	LOAEC = 30 mg/m ³
<i>Genetic Toxicity</i>	OECD 476 Mammalian cell gene mutation	250/500/1000/1500/2000 µg/ml in water	NOT GENOTOXIC
<i>Carcinogenicity</i>	Read across study 1977	248/495 mg /kg/day for 103 weeks on rats oral	NOT EXPECTED BE CARCINOGENS

DISODIUM EDTA

Endpoint	Test	Dose	Result
<i>Toxicity to reproduction</i>	Read across 1963	On 23 male and 23 female rats for 2 years at 0,50/125/250 mg/kg	NO EFFECTS ON REPRODUCTION

DISODIUM EDTA

Scenari espositivi: dentifricio per adulti allo 0,2%

	Assorbimento	Appl./die	mgxKgxdie
Rinse off	5 %	3	43,29

$$\text{SED} = \frac{5 \times 43,29 \times 0,002}{100} = 0,004$$

$$\text{MOS} = \frac{500}{0,004} = 125000$$

DISODIUM EDTA

Conclusioni:

**Scarso assorbimento sia dermico che orale,
Non irritante sulla cute e sugli occhi, non
sensibilizzante, NOAEL 500 mg/kg , inoltre non
si dimostra essere mutageno, cancerogeno e
tossico per la riproduzione**

GRAZIE PER L'ATTENZIONE
Gruppo IV