



PT INDOXIDE

MANUFACTURER OF INDOX BRAND ZINC OXIDE



Head Office : Jl. Seruni 33, Surabaya 60272, Indonesia Phone : (62-31) 532 3275, 545 3709, 534 0376 Fax : (62-31) 545 0058
Branch Office : Jl. Bukit Gading Raya, Gading Bukit Indah RC - 5, Kelapa Gading, Jakarta Utara 14240, Indonesia
Phone : (62-21) 2907 9010 (Hunting) Fax : (62-21) 2907 9011

Material Safety & Health Data Sheet

1. Material Identification

Product's name : Zinc Oxide
Manufacturer's name : PT. INDOXIDE
Address : Jl. Seruni 33, Surabaya 60272, Indonesia
Phone number : (+62-31) 532 3275 , 534 0376
Fax number : (+62-31) 545 0058
Empirical formula : ZnO
Molecular weight : 81.38
Percentage composition : Zn 80.34 % , O 19.66 %

2. Chemical Composition / Ingredients

Purity, as ZnO : 99.5 – 99.9 %
Lead, as PbO : 0.002 – 0.02 %
Cadmium, as CdS : 0.001 – 0.03 %
Iron : 0.0005 – 0.005 %
Copper : 0.0005 – 0.001 %
Manganese : 0.0005 – 0.001 %
Total Sulfur, as S : 0.005 – 0.03 %
Total Chlorine : 0.01 – 0.1 %

3. Physical Data

Physical state : Powder
Color : White or yellowish white
Odor : Odorless
Specific gravity : 5.57 ± 0.1
PH at 25 °C : 7.37
Solubility : Practically insoluble in water, soluble in dilute acetic or mineral acids, ammonia, ammonium carbonate, fixed alkali hydroxide solutions.



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4. Hazards Identification

- Physical / Chemical hazards : The data available do not support any chemical hazard
- Environmental hazard : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Adverse human health effects
- Inhalation : May cause irritation to the respiratory tract
 - Skin contact : Repeated or prolonged skin contact may cause irritation.
 - Eye contact : Excessive dust exposure may cause minor eye irritation.
 - Ingestion : Health hazard if ingested in large quantities, can cause abdominal pain, nausea, cramps.

5. First Aid Measures

- Effects and symptoms : No specific effects and / or symptoms have been reported or known.
- Ingestion : Immediately rinse mouth with water. Do not induce vomiting. Give water to drink. If feeling unwell, immediately seek medical attention.
 - Protection of first-aiders : Avoid all unnecessary exposure. Use appropriate protection.

6. Fire-Fighting Measures

- Extinguishing media
- Suitable : Not combustible. Use extinguishing media on surroundings.



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- Note to be used : None
- Protection against fire : Dike fire control water for later disposal.
- Protection of fire-fighters : Use breathing apparatus (self-contained breathing apparatus with full face shield).
Wear suitable protective clothing.
- Hazardous combustion and decomposition products. : None

7. Accidental Release Measures

- Personal precautions : Wear suitable protective clothing and gloves. Avoid dust production
- Environmental precautions : Prevent dispersion. Do not allow to enter sewage system. Keep away from drains, surface and ground water. Avoid soil contamination.
- Methods for cleaning up : Take-up mechanically. Collect spills and put into appropriated container. Re-us/recycling of waste highly

8. Handling And Storage

- Storage : Usual precautions for nuisance dust should be followed. Keep in sealable containers. Storage in tightly closed packing. Keep away from acid and bases.
- Handling : Avoid all unnecessary exposure. Use appropriate protection. Avoid dust production.
- Packing Materials :
- Suitable : Keep only in the original container.
- Specific use (s) : Not applicable.



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9. Special Protection Information.

Ventilation

Storage area and working environment: General ventilation is recommended.

Respiratory Protection

Approved respiratory protection should be used.

Protection Gloves

A kind of gloves that resists heat.

Eye Protection

Safety glasses with side shields.

Other Protection

Appropriate clothing to avoid skin contact.

10. Special Precautions

Handle with reasonable care. Avoid contact with eyes. Practice good personal hygiene.

Store in a well-ventilated area, at temperature between 5 – 35°C.

Expire date for 5 years after produce.

11. Stability And Reactivity

Hazardous reactions	: None
Physico -Chemical stability	: Stable under normal conditions of handling and storage.
Material to avoid	: Keep away from acid and bases.
Conditions to avoid	: None
Hazardous decomposition product	: None

12. Toxicological Information

Acute toxicity

- Inhalation	: (rat) 4 hours LC50 > 5.7 mg ZnO/I Klimisch et al. 1982
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- Dermal : NO date available
- Ingestion : (rat) LD50 > 15000 mg ZnO/kg OECD 401
- Dermal irritation (rabbit) : Not irritant. OECD 404
- Eyes irritation (rabbit) : Not irritant. OECD 405
- Chronic toxicity : 50 mg ZnO/ day
- Sensitization : This product has been reported not to cause skin sensitization
- Carcinogenicity : No evidence of carcinogenicity in laboratory animals. No evidence of carcinogenicity in man.
- Mutagenicity : In vitro and in vivo test of short-term genotoxicity.
- Reproductive toxicity : No experimental or Epidemiological evidence of reproduction toxicity.
- Teratogenicity
- Other toxicological information : Zinc fume fever is attributable to exposure to ultra-fine zinc oxide particles (generated for example during welding and cutting of galvanized steel), but is not experienced in inhalation exposure to commercially traded Zinc Oxide.
- Rat inhalation LC50 (mg/I/4h) : > 5.7 ZnO

13. Ecological Information

- Persistence and degradability : Not applicable
- Bio accumulative potential : Not applicable
- Mobility : Not applicable



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14. Disposal Considerations

Disposal : Comply with local regulations for disposal

15. Transport Information

Non-hazardous for air, sea, and road freight.

16. Other Information

Information contained in this MSDS refers only to the specific material designated and does not relate to any process or to use with any other materials. It is intended for use by persons possessing technical knowledge at their own discretion and risk.