

CRISTAL 128

Material Safety Data

| Product Identification | | |
|--|--|-------------------|
| Trade name | CRISTAL 128 | |
| Manufactured by | The National Titanium Dioxide Co. Ltd PO Box 13586 Jeddah 21414 Kingdom of Saudi Arabia | |
| Telephone | +966 (0)2 651 9883 | |
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| Email | info@cristalarabia.com | |
| Composition/Information on Ingredients The preparation consists of the following | | |
| Material | CAS Number | Typical Range (%) |
| Titanium dioxide | 13463-67-7 | 94.0 – 97.0 |
| Aluminium hydroxide | 21645-51-2 | 2.0 – 4.0 |
| Zirconium oxide | 1314-23-4 | 0.3 – 1.0 |
| A fractional percentage of organic additive is also present. None of the above substances are reported as potential carcinogens by OSHA. | | |
| Hazards Information Adverse human health effects | | |
| Preliminaries | Inert nuisance dust. Can cause lung irritation. | |
| Primary route of entry | Inhalation of airborne dust. | |
| Symptoms of exposure | Coughing, sneezing or irritation of the mucous membrane. | |
| Restrictive conditions | Breathing or respiratory tract disorder/disease would be aggravated by exposure to airborne dust. | |
| Eyes | Inert foreign body hazard. | |
| First Aid Measures | | |
| Inhalation | Remove to fresh air. | |
| Eyes | Flush with large amounts of water. If irritation persists, seek medical attention. | |
| Skin | Wash with water and mild soap. | |
| Ingestion | No adverse health effects during the course of normal industrial handling. If large quantities ingested, seek medical attention. | |
| Fire Fighting Methods | | |
| Extinguishing media | No fire hazard. | |
| Precautions should be taken against static discharge of electricity during powder handling operations. | | |
| Accidental Release Measures | | |
| Use any mechanical means to remove powder. Avoid dusting. Prevent entry to natural waterways. | | |
| Handling and Storage | | |
| Handling | Use suitable ventilation to prevent excessive inhalation and skin contact. Avoid static discharge during powder handling operations. | |
| Storage | Store in dry area. Wet material may become very slippery. | |
| Exposure Controls/Personal Protection | | |
| Exposure control | Generally handle in areas of good ventilation. If airborne dust is over or thought to approach the occupational exposure standard, local exhaust may be necessary. | |
| Respiratory protection | Use approved dust respirator if OES is likely to be exceeded. | |
| Hand protection | Use gloves for prolonged/repeated contact. | |
| Eye protection | Use safety glasses/goggles. | |
| Skin protection | Wear normal protective overalls. Sensitive skin can be protected further by use of a barrier cream or moisturiser. | |

Physical and Chemical Properties

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| Appearance | Fine white powder |
| Odour | Odourless |
| pH | 7.5 (Typical) 10% slurry |
| Melting point °C | 1,840 |
| Boiling point °C | 2,500 – 3,000 |
| Decomposition °C | N/A |
| Flash point °C | N/A |
| Autoignition °C | N/A |
| Explosion properties | N/A |
| Relative density | 4.1 (water = 1) |
| Solubility (water) | Insoluble |
| Other data | – |
| Bulk density kg/l | 0.64 – 0.88 |

Stability and Reactivity This product is chemically stable, and non-reactive

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|-------------------------|------|
| Conditions to avoid | None |
| Materials to avoid | None |
| Hazardous decomposition | None |

Toxicological Information This product is non-toxic and physiologically harmless

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| Occupational exposure limits: | |
| Titanium dioxide (OES) | 10 mg/m ³ total inhalable (8 hour TWA) 5 mg/m ³ respirable dust (8 hour TWA) |

Ecological Information

No known harmful effects on Goldorfen (*Leuciscus Idus*) with 1 g/litre concentration (Maximum testing). Water flea (*Daphnia Magna*) with 1 g/litre concentration (No aquatic Toxicity). Available evidence suggests that titanium dioxide does not cause any significant adverse environmental effects.

Disposal

This product does not constitute any known hazard for disposal into sanitary landfill or industrial waste disposal landfill. Attention should however be paid to local and national waste regulations.

Transport Information

This material is not classified as a dangerous good by international transport regulations.

Regulatory Information

No Hazard Labelling is required for this Product. This product is given an OES under the Control of Substances Hazardous to Health regulations, as per the Health and Safety Executive in the United Kingdom.

Other Information

None.

The above is provided for guidance only.

For further information contact Cristal Technical Sales and Services

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