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MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

| | |
|---------------------------|---|
| COMPOSITION TiC | PRODUCT NAME Titanium Carbide |
|---------------------------|---|

Section 2- HAZARDOUS INGREDIENTS

Note: Products under normal conditions do not represent an inhalation, ingestion or contact health hazard.

| MATERIAL OR COMPONENT | CAS NUMBER | WT% | EXPOSURE LIMITS | |
|-------------------------|-------------------|------------|-------------------------------|------------------|
| | | | OSHA PEL (Mg/M3) | ACGIH TLV(MG/M3) |
| Titanium Carbide | 12070-08-5 | 100 | Not Set | Not Set |
| | | | Nuisance dust= 10mg/m3 | |

Section 3- PHYSICAL DATA

| | |
|--|---|
| MATERIAL IS (AT NORMAL CONDITIONS) <input type="checkbox"/> Liquid <input type="checkbox"/> Solid <input type="checkbox"/> Gas <input type="checkbox"/> Other | APPEARANCE AND ODOR Grey metallic powder; No odor |
| MELTING POINT (BASE METAL) 3140C (+/-90) | SPECIFIC GRAVITY 4.93 gm/cc |

Section 4- FIRE AND EXPLOSION

| | | | |
|---|--|-----------------------|-----------------------|
| Flash Point (Method Used) N/A | Flammable Limits Non-Flammable | LEL N/A | UEL N/A |
| EXTINGUISHING MEDIA DO NOT USE WATER ON METAL FIRES – Use dry chemical, CO2, graphite | | | |
| SPECIAL FIRE FIGHTING PROCEDURES Requires full face self contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. | | | |
| UNUSUAL FIRE AND EXPLOSION HAZARDS Spontaneous dust explosion possible due to static initiation if dust is very fine. | | | |

Section 5- REACTIVITY DATA

| | |
|---|---|
| STABILITY Stable | INCOMPATIBILITY (MATERIALS TO AVOID) Contact with acids can generate flammable hydrogen gas |
| CONDITIONS TO AVOID None | |
| HAZARDOUS DECOMPOSITION PRODUCTS None | |

Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

Inhalation Skin Skin Absorption Eye Contact Ingestion

EFFECTS OF OVEREXPOSURE

INHALATION: May cause mild irritation of the nose and throat. Exposure to TiC2 aerosol for five months caused lung changes in humans similar to silicosis.

SKIN CONTACT: None

EYE CONTACT: Mechanical irritation, watering of eyes and inflammation of eyelids.

OTHER: Insoluble titanium compounds are generally considered physiologically inert and non-toxic.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Respiratory disorders

TOXICITY DATA: No specific data on this compound

CARCINOGENICITY: None NTP? No IARC Monographs? No OSHA Regulated? No

EMERGENCY & FIRST AID PROCEDURES

INHALATION: Remove victim from exposed area to fresh air. Give oxygen if breathing is difficult and seek medical attention.

SKIN CONTACT: Remove contaminated clothing and shoes immediately. Brush material off skin and wash affected area with mild soap and water. Seek medical attention.

EYE CONTACT: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes. Seek medical attention.

INGESTION: If large quantities are consumed; Give 1-2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCUDRES

Wear a self contained breathing apparatus and full protective clothing. Isolate the area where the spill occurred and insure that proper ventilation is available. Vacuum up spill using a high efficiency unit and place in a container for proper disposal. Take care not to raise dust.

WASTE DISPOSAL METHODS

Observe all federal, state and local regulations when storing or disposing of this substance.

Section 8- SPECIAL PROTECTION

RESPIRATORY

NIOSH approved dust-mist-fume cartridge respirator.

VENTILATION

Local Exhaust: Maintain below TLV levels. General Mechanical: Recommended.

EYE PROTECTION & PROTECTIVE CLOTHING

Use safety glasses. Wear neoprene protective gloves. Use protective gear suitable to prevent contamination.

Section 9- SPECIAL PRECAUTIONS

Store in tightly closed containers in a cool, dry place. Wash hands and face thoroughly after handling and before eating.

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