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MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

COMPOSITION WC	PRODUCT NAME Tungsten Carbide
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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)
Tungsten Carbide	12070-12-1	0.0-100.0	NE	NE

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 Black Powder, No Odor
MELTING POINT (BASE METAL) Not Applicable	SPECIFIC GRAVITY 13.6gm/cc at 18.0

Section 4- FIRE AND EXPLOSION

Flash Point (Method Used) N/A	Flammable Limits Non-Flammable	LEL N/A	UEL N/A
EXTINGUISHING MEDIA N/A. Use suitable extinguishing media for surrounding materials and type of fire.			
SPECIAL FIRE FIGHTING PROCEDURES Wear full face self contained breathing apparatus with full protective clothing to prevent contact with skin & eyes. Isolate runoff to prevent environmental pollution.			
UNUSUAL FIRE AND EXPLOSION HAZARDS May emit toxic fumes if involved in fire. Oxidizes on heating in air. Burns in fluorine at room temperature. Ignites at 600C in nitrogen oxide atmosphere. May have violent reaction with F2, ClF3, NOx, IF5, PbO2, NO2, N2O			

Section 5- REACTIVITY DATA

STABILITY Stable	INCOMPATIBILITY (MATERIALS TO AVOID) Chlorine, fluorine, nitrogen dioxide, iodine pentafluoride and lead oxide
CONDITIONS TO AVOID None	
HAZARDOUS DECOMPOSITION PRODUCTS None recorded	

Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

Inhalation **Skin** **Skin Absorption** **Eye Contact** **Ingestion**

EFFECTS OF OVEREXPOSURE

INHALATION: ACUTE: Toxic by inhalation. May cause irritation to the mucous membranes, coughing, dyspnea, soreness of the chest, weight loss, hemoptysis, bronchitis, asthma, pulmonary fibrosis and radiological changes in the lungs. **CHRONIC:** May cause damage to the lungs.

SKIN CONTACT: ACUTE: May cause irritation. **CHRONIC:** No chronic health effect recorded.

EYE CONTACT: ACUTE: May cause irritation. **CHRONIC:** May cause conjunctivitis.

INGESTION: ACUTE: May cause irritation to the gastrointestinal tract and diarrhea. **CHRONIC:** No chronic health effects recorded.

TARGET ORGANS: May affect respiratory system.

EMERGENCY & FIRST AID PROCEDURES

INHALATION: Remove victim from exposed area to fresh air, keep warm and quiet. 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 if symptoms persist.

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

INGESTION: 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 High Efficiency Particulate Absolute air filter 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, vapor cartridge respirator.

VENTILATION

Maintain concentration below TLV.

EYE PROTECTION & PROTECTIVE CLOTHING

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

Section 9- SPECIAL PRECAUTIONS

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