



5/23/95

MATERIAL SAFETY DATA SHEET

COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

CHEMICAL IDENTITY

LABEL IDENTITY	Titanium Carbide
CHEMICAL NAME/SYNONYMS	Titanium Carbide
FORMULA	TiC
CHEMICAL FAMILY	Metal Carbide
CAS REGISTRY NUMBER	12070-08-5
HAZARDOUS INGREDIENTS	Titanium Carbide
%: 100	TLV (Units): Not Established

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Gray metallic powder, no odor
BOILING POINT	4820 (°C)
DENSITY (gm/cc)	4.93
VAPOR PRESSURE @ 20°	NA
% VOLATILE BY VOLUME	NA
REACTION WITH WATER	None
EVAPORATION RATE (H2O=1)	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	3140 (°C)

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NA
AUTOIGNITION TEMPERATURE (°C)	NA
EXTINGUISHING MEDIA	Sand; Dry powder type agents specifically designed for metal powder fires
SPECIAL FIRE FIGHTING PROCEDURES	Wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.
UNUSUAL FIRE & EXPLOSION HAZARDS	Dust and fumes from this products may be a fire and explosion hazard when exposed to high temperatures or ignition sources. Particle size and dispersion in air determine reactivity.



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HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **may cause mild irritation of nose and throat.**

DERMAL/EYE CONTACT: **none**

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

HEALTH HAZARD INFORMATION CONTINUED

EMERGENCY FIRST AID PROCEDURES:

INHALATION: **May cause mild irritation of the nose and throat. Remove victim to fresh air. Administer oxygen. Seek medical attention.**

DERMAL/EYE CONTACT: **May be a mild irritant. Brush off skin. Wash affected area with soap and water. Flush eyes with water for 15 minutes. Seek medical attention.**

INGESTION: **Induce vomiting. Seek medical attention.**

OTHER: **None**

TOXICITY DATA: **No data on this compound.**

ROUTES OF ENTRY: **Inhalation, Skin and Ingestion**

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: **Persons with pre-existing eye or skin conditions or impaired pulmonary function may be more susceptible to the effects of this product.**

CARCINOGENICITY: **None**

NTP: **None**

IARC MONOGRAPHS: **No**

OSHA REGULATED: **No**

REACTIVITY DATA

STABILITY

Stable

CONDITIONS CONTRIBUTING TO UNSTABILITY

Keep away from sparks or ignition sources.

INCOMPATIBILITY (MATERIALS TO AVOID)

Strong bases, strong acids

CONDITIONS DO AVOID

None Known

HAZARDOUS DECOMPOSITION PRODUCTS

None Known

HAZARDOUS POLYMERIZATION

Will Not Occur



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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **Wearing full protective clothing, isolate the area and insure proper ventilation. Vacuum up spill with HEPA filter and place in a container for proper disposal. Spill area can be washed with water. Collect wash water for approval disposal.**

WASTE DISPOSAL METHOD: **In accordance with regulations. May be reclaimed or sold for scrap.**

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	NIOSH / MSHA approved respirator
LOCAL EXHAUST	Recommended
MECHANICAL (general)	Use with adequate ventilation
PROTECTIVE GLOVES	Chemically resistant gloves
EYE PROTECTION	Safety glasses with side shields
OTHER PROTECTIVE EQUIPMENT	Maintain sink, safety shower and eyewash fountain in the work area. Wear full protective clothing at all times.

SPECIAL PRECAUTIONS AND TRANSPORTATION REGULATIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:
Store in tightly closed containers in a cool, dry place. Avoid breathing dust. Avoid getting in eyes or on skin. Wash hands and face thoroughly.

TRANSPORTATION REQUIREMENTS	DOT CLASS:	None
	UN NUMBER:	N. C.
	IMCO CLASS:	N. C.
	OTHER:	

PRECAUTIONARY LABELING **NONE**

THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKE NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

NA= NOT APPLICABLE

ND= NO DATA FOUND

NC=NOT CLASSIFIED