



MATERIAL SAFETY DATA SHEET

COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 07-22-86

CHEMICAL IDENTITY

LABEL IDENTITY	Titanium Boride	
CHEMICAL NAME/SYNONYMS	Titanium Boride	
FORMULA	TiB₂	
CHEMICAL FAMILY	Metal Boride	
CAS REGISTRY NUMBER	12045-63-5, LISTED ON TSCA.	
HAZARDOUS INGREDIENTS	Titanium Boride	
%	TLV	OSHA/PEL
100	Not set (relatively non-toxic via all routes of exposure)	

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Black crystalline powder, no odor
BOILING POINT	ND
DENSITY (gm/cc)	4.50
VAPOR PRESSURE @ 20°	NA
% VOLATILE BY VOLUME (%)	NA
REACTION WITH WATER	None
EVAPORATION RATE (H ₂ O=1)	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	ND

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NA
AUTOIGNITION TEMPERATURE (°C)	NA
FLAMMABILITY	Non-flammable
EXTINGUISHING MEDIA	NA
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE & EXPLOSION HAZARDS	None

HEALTH HAZARD INFORMATION

TOXICITY DATA	No data		
HMIS RATING:			
HEALTH: 0	FLAMMABILITY: 0	REACTIVITY: 0	PERSONAL PROTECTION: B
ROUTES OF ENTRY	INHALATION:	Yes	
	SKIN:	No	
	INGESTION:	No	



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HEALTH HAZARD INFORMATION CONTINUED

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **No data**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **as an insoluble titanium compound TiB₂ would be considered a nuisance dust. No long term effects would be expected.**

DERMAL/EYE CONTACT: **not an irritant to the skin or the eye nor is it absorbed by the skin.**

OTHER: **relatively non-toxic.**

CARCINOGENICITY: **None** NTP: IARC MONOGRAPHS: OSHA REGULATE:

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **induce vomiting**

INHALATION: **remove to fresh air**

SKIN CONTACT: **flush with soap and water**

EYE CONTACT: **flush to remove particles**

REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	None
INCOMPATIBILITY (MATERIALS TO AVOID)	None
HAZARDOUS DECOMPOSITION PRODUCTS	None
HAZARDOUS POLYMERIZATION	Will Not Occur
CONDITIONS TO AVOID	None

SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Sweep or scoop up and remove. Vacuum using vacuum cleaner equipped with HEPA filter.

WASTE DISPOSAL METHOD:

Dispose of with normal refuse.



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SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	Half-mask air purifying or respirator for dusty operations
LOCAL EXHAUST	For extreme dusty conditions
MECHANICAL (general)	Use with adequate ventilation
SPECIAL	Handle in dry, controlled atmosphere
OTHER	NA
PROTECTIVE GLOVES	Any glove to prevent skin contact
EYE PROTECTION	Safety glasses
OTHER PROTECTIVE EQUIPMENT	Normal laboratory wear

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:
Wash thoroughly after handling. Keep container closed.

TRANSPORTATION REQUIREMENTS	DOT CLASS:	Not Classified
	UN NUMBER:	N. C.
	IMCO CLASS:	N. C.
	OTHER:	

PRECAUTIONARY LABELING **NONE**

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NA= NOT APPLICABLE

ND= NO DATA FOUND