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MATERIAL SAFETY DATA SHEET

Section 1- PRODUCT IDENTIFICATION

COMPOSITION Bi4TiO3	PRODUCT NAME Bismuth Titanate
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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)
Bismuth Titanate	12010-77-4	305	Not Set	Not Set

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 Light yellow powder, pieces or pressed parts
MELTING POINT (BASE METAL) 271.3° C	SPECIFIC GRAVITY

Section 4- FIRE AND EXPLOSION

Flash Point (Method Used) N/A	Flammable Limits Non flammable	LEL N.A.	UEL N.A.
EXTINGUISHING MEDIA Non flammable			
SPECIAL FIRED FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

Section 5- REACTIVITY DATA

STABILITY Sable	INCOMPATIBILITY (MATERIALS TO AVOID) Acids or acid fumes
CONDITIONS TO AVOID None	
HAZARDOUS DECOMPOSITION PRODUCTS Toxic fumes when mixed with acids	

Section 6- HEALTH HAZARD GUIDE

MAJOR EXPOSURE HAZARD

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

EFFECTS OF OVEREXPOSURE

No data is available on the effects of inhalation of this compound. In general, insoluble bismuth and titanate compounds are known for mild respiratory tract irritation. No data on long term effects. Dermal/eye contact: May be a mild irritant to both skin and eyes.

In Soluble bismuth and titanate compounds are considered to be low in toxicity. But repeated excessive exposure via inhalation or ingestion may cause "Bismuth Line", a blue-black discoloration of the gums as well as a foul odor to the breath.

EMERGENCY & FIRST AID PROCEDURES

INHALATION: Remove from exposed area to fresh air.

INGESTION: If conscious give 1-2 glasses fluids and induce vomiting. Never give anything by mouth or induce vomiting to an unconscious victim.

SKIN CONTACT: Brush material off skin. Wash affected area with soap or mild detergent and large amounts of water.

EYE CONTACT: Flush eyes with lukewarm water lifting up the upper and lower lids for at least fifteen minutes. If irritation persists, contact a physician.

Section 7- SPILL OR LEAK PROCEDURES

SPILL OR LEAK PROCEDURES

Scoop up and vacuum, avoid raising dust.

WASTE DISPOSAL METHODS

Dispose of normal refuse.

Section 8- SPECIAL PROTECTION

RESPIRATORY

Approved respirator for dusts and mists

VENTILATION

Local exhaust: Recommended. Mechanical exhaust: Not recommended.

EYE PROTECTION & PROTECTIVE CLOTHING

Safety glasses, any gloves to limit skin contact (normal work wear).

Section 9- SPECIAL PRECAUTIONS

WORK/HYGIENIC/MAINTENANCE PRACTICES

None

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