

TANTALUM**1596**

October 2005

CAS No: 7440-25-7 (powder)
RTECS No: WW5505000 Ta
UN No: 3089 Atomic mass: 180.9

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible. Dry tantalum powder may spontaneously ignite on contact with air.	NO open flames, NO sparks, and NO smoking.	Dry powder. Dry sand. Special powder. NO carbon dioxide, foam, water.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water.

EXPOSURE		PREVENT DISPERSION OF DUST!	
Inhalation	Cough.	Avoid inhalation of dust.	Fresh air, rest.
Skin		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Remove all ignition sources. Personal protection: P1 filter respirator for inert particles. Cover the spilled material with inert absorbent. Vacuum spilled material, then remove to safe place.	UN Hazard Class: 4.1 Airtight. UN Pack Group: II

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-41GF3-II+III NFPA Code: H1; F3; R1	Fireproof. Separated from strong oxidants and halogens.

IMPORTANT DATA

Physical State; Appearance

BLACK SOLID IN VARIOUS FORMS

Physical dangers

Dust explosion possible if in powder or granular form, mixed with air.

Chemical dangers

Reacts with halogens and oxidants causing fire and explosion hazard.

Occupational exposure limitsTLV: 5 mg/m³ as TWA; (ACGIH 2005).MAK: (Inhalable fraction) 4 mg/m³; (Respirable fraction) 1.5 mg/m³; (DFG 2005).**Inhalation risk**

A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.

Effects of short-term exposure

May cause mechanical irritation.

PHYSICAL PROPERTIES

Boiling point: 5425/C
Melting point: 2996/C
Density: 14.5 g/cm³Solubility in water: none
Flash point: >250/C

ENVIRONMENTAL DATA

NOTES

Combustion in a confined space may turn into detonation.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information