SILICON

1508
November 2003

CAS No: 7440-21-3
RTECS No: VW0400000
UN No: 1346

Si
Atomic mass: 28.09

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible under specific conditions.	NO open flames.	Special powder, dry sand, NO hydrous agents.
EXPLOSION	Finely dispersed particles form explosive mixtures in air. Risk of fire and explosion on contact with halogens oxidants.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding).	
EXPOSURE			
Inhalation	Cough.	Local exhaust or breathing protection.	Fresh air, rest.
Skin	Redness. Roughness.	Protective gloves.	Rinse skin with plenty of water or shower.
Eyes	Redness.	Safety goggles.	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
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.	UN Hazard Class: 4.1 UN Pack Group: III

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-41GF3-II+III	Separated from incompatible materials. See Chemical Dangers.

IPCS
International Programme on Chemical Safety

Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission

SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance
STEEL-GREY CRYSTALS OR BLACK TO BROWN AMORPHOUS POWDER

Physical dangers
Dust explosion possible if in powder or granular form, mixed with air. If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.

Chemical dangers
Reacts violently with oxidants, halogens, metal carbonates and metal acetylides causing fire hazard. Reacts violently with metal hexafluorides causing fire and explosion hazard. Reacts on heating with water forming flammable/explosive gas (hydrogen - see ICSC0001).

Occupational exposure limits
TLV: 10 mg/m^3 as TWA; (ACGIH 2003).
MAK not established.

Routes of exposure
The substance can be absorbed into the body by inhalation.

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

Effects of short-term exposure
May cause mechanical irritation to the eyes and the respiratory tract.

PHYSICAL PROPERTIES

Boiling point: 2355°C
Melting point: 1410°C
Density: 2.33 g/cm^3
Solubility in water: none

ENVIRONMENTAL DATA

NOTES

Reacts violently with fire extinguishing agents such as water.

ADDITIONAL INFORMATION