

Summary of Risk Management Measures

Tetrachlorosilane (CAS 10026-04-7)

Safe use has been demonstrated by calculation of risk characterisation ratios. These are based on the following risk management measures:

Exposure scenario	Description	General measures	Specific Human Health risk management measures	Specific Environment risk management measures
ES1	Production (site specific)	(i) Rigorous containment and safe handling in line with industry best practice. (ii) Procedural and technological control using Best Available Technique (BAT)	(i) Local Exhaust ventilation (LEV) (ii) Personal Protective Equipment (PPE): Gloves/ gauntlets (5-layer laminate of PE and EVOH (4H) or Butyl & Viton types recommended; nitrile gloves may also be used for short durations); Full-face respirator with ABEK-filter; Goggles or face shield; and Self-contained, positive pressure breathing apparatus (for prolonged or high exposures) (iii) Specific workers' training (iv) Duration of exposure: <15 min for PROC8b and 9	(i) Use of air emission abatement equipment such as incinerators and scrubbers (ii) Treatment of effluent in biological waste water treatment plant. (iii) Incineration of waste
ES2, ES3 and ES4	Monomer, Chemical intermediate and Semiconductor Manufacture (Down stream user)	Rigorous containment and safe handling in line with industry best practice.	(i) Local Exhaust ventilation (LEV) (ii) Personal Protective Equipment (PPE): Gloves/ gauntlets (5-layer laminate of PE and EVOH (4H) or Butyl & Viton types recommended; nitrile gloves may also be used for short durations); Full-face respirator with ABEK-filter; Goggles or face shield and Self-contained, positive pressure breathing apparatus (for prolonged or high exposures) (iii) Specific workers' training (iv) Duration of exposure: <15 min for PROC2, 3, 8b and 9	(i) Use of air emission abatement equipment such as incinerators, scrubbers and fabric filters is applicable as a 'best practice'. (ii) Treatment of effluent in waste water treatment plant.
ES5	Laboratory reagent	Good Laboratory Practice (GLP)	(i) Local Exhaust ventilation (Fume cupboard) (ii) Personal Protective Equipment (PPE): Gloves/ gauntlets (5-layer laminate of PE and EVOH (4H) or Butyl & Viton types recommended; nitrile gloves may also be used for short durations) (iii) Basic workers' training (iv) Duration of exposure: 15 min to 1 h	N/A