

Chemical	Chlorine
CAS Number	7782-50-5
Category	Category III
Cancer Classification	EPA: Not Evaluated IARC: Group 3; unclassifiable as to carcinogenicity to humans (chlorinated drinking water) NTP: TR-392 Equivocal evidence of carcinogenic activity in female F344/N rat. No evidence carcinogenic activity in male F344/N rat, both sexes B6C3F ₁ mouse.
Proposed HAAS	.2 ug/m ³
Basis of Proposed HAAS	CAL EPA Chronic REL .2 ug/m ³ Uncertainty Factor=30 (added/reviewed 2/00 OEHHA)
Basis of Value used to derive Proposed HAAS	Critical Effect: Hyperplasia in respiratory epithelium Study Animal: Female F344 rat Exposure Route: Inhalation (gas); discontinuous whole body exposure
Dose Extrapolation Method	BMC. ₀₅
Notes	CAL EPA notes Kennedy et al, 1991 study of 321 pulpmill workers that suggests chronic respiratory impairment may be associated with exposure to chlorine and/or chlorine dioxide.
Additional Tox and/or Occupational Values	IRIS Chronic Oral Reference Dose .1 (mg/kg-d) Uncertainty Factor=100 Confidence=Medium VOSHA 1910.1 PEL 1500 ug/m ³ (.5 ppm) TWA 3,000 ug/m ³ (1 ppm) STEL NIOSH REL 1450 ug/m ³ (.5 ppm) Ceiling [15 minute] IDLH 29,000 ug/m ³ (10 ppm) ACGIH TLV-TWA 1500 ug/m ³ (.5 ppm) STEL 2900 ug/m ³ (1 ppm)
Comparison Values	AEGL 1 (proposed): 8 hour 1450 ug/m ³ (.5 ppm)
Derivation of HAAS: HAAS (ug/m ³) = CAL EPA REL = .2 ug/m ³	