2. Studies of Cancer in Humans

See Introduction to the Monographs on Gallium Arsenide and Indium Phosphide.

Table 1. Occupational exposure limits and guidelines for arsenic (elemental and inorganic)

Country or region	Concentration (mg/m^3)	Interpretation[a]	Carcinogen classification
Australia	0.05	TWA	1[b]
Belgium	0.1	TWA	Ca[c]
Canada			
Alberta	0.2	TWA	
Quebec	0.6	STEL	
	0.1	TWA	
China	0.01	TWA	
	0.02	STEL	
Finland	0.01	TWA	
Germany		MAK	1[d]
Hong Kong SAR	0.01	TWA	A1[e]
Ireland	0.1	TWA	Ca1[f]
Japan	0.003	TWA	1[g]
Malaysia	0.01	TWA	
Netherlands	0.05	TWA	
	0.1	STEL	
New Zealand	0.05	TWA	A1[e]
Norway	0.01	TWA	Ca[h]
Poland	0.01	TWA	Rc[i]
South Africa	0.1	TWA	
Sweden	0.01 (new facilities or alteration of old ones)	TWA	Ca[j]
	0.03	TWA	Ca
UK	0.1	TWA (MEL)	
USA[l]			
ACGIH	0.01	TWA (TLV)	A1[e]
NIOSH	0.002	Ceiling (REL)	Ca[k]
OSHA	0.01	TWA (PEL)	Ca[k]

From ACGIH Worldwide® (2003)

[a] TWA, time-weighted average; STEL, short-term exposure limit; MAK, maximum allowed concentration; MEL, maximum exposure limit; TLV, threshold limit value; REL, recommended exposure limit; PEL, permissible exposure limit

[b] Established human carcinogen

[c] Carcinogen

[d] Substance which causes cancer in man

[e] Confirmed human carcinogen

[f] Substance known to be carcinogenic to humans

[g] Carcinogenic to humans

[h] Potential cancer-causing agent

[I] Agent carcinogen to humans

[j] Substance is carcinogenic.

[k] Carcinogen

[l] ACGIH, American Conference of Governmental Industrial Hygienists; NIOSH, National Institute for Occupational Safety and Health; OSHA, Occupational Health and Safety Administration