

Criteria for Carcinogenicity Toxicity (Quantitative Analysis)

NIOSH Banding Criteria for Cancer			
Exposure/ Dosing Route	Band		
	C	D	E
Slope factor	$< 0.01 \text{ (mg/kg-day)}^{-1}$	$\geq 0.01 \text{ to } < 10 \text{ (mg/kg-day)}^{-1}$	$\geq 10 \text{ (mg/kg-day)}^{-1}$
Inhalation unit risk	$< 3 \times 10^{-6} \text{ (}\mu\text{g/m}^3\text{)}^{-1}$	$\geq 3 \times 10^{-6} \text{ to } < 0.01 \text{ (}\mu\text{g/m}^3\text{)}^{-1}$	$\geq 0.01 \text{ (}\mu\text{g/m}^3\text{)}^{-1}$
TD ₀₅	$> 5 \text{ mg/kg-day}$	$> 0.005 \text{ to } \leq 5 \text{ mg/kg-day}$	$\leq 0.005 \text{ mg/kg-day}$
TC ₀₅	$> 16700 \text{ }\mu\text{g/m}^3$	$> 5 \text{ to } \leq 16700 \text{ }\mu\text{g/m}^3$	$\leq 5 \text{ }\mu\text{g/m}^3$

Criteria for Carcinogenicity Toxicity (Qualitative Analysis)

Classification	Band	Determinant Score
National Toxicology Program Report on Carcinogens		
<i>Known to be human carcinogen</i>	E	30
<i>Reasonably anticipated to be human carcinogen</i>	E	30
Environmental Protection Agency Integrated Risk Information System		
<i>Group A (human carcinogen)</i>	E	30
<i>Carcinogenic to humans</i>	E	30
<i>Group B1 (probable human carcinogen)</i>	E	30
<i>Group B2 (probable human carcinogen)</i>	E	30
<i>Likely to be carcinogenic to humans</i>	E	30
<i>Group C (possible human carcinogen)</i>	D	20
<i>Suggestive evidence of carcinogenic potential</i>	D	20
<i>Group D (not classifiable as to human carcinogenicity)</i>	<i>No band</i>	<i>No score</i>
<i>Data are inadequate for an assessment of carcinogenic potential</i>	<i>No band</i>	<i>No score</i>
<i>Group E (evidence of non-carcinogenicity for humans)</i>	A	30
<i>Not likely to be carcinogenic to humans</i>	A	30
International Agency for Research on Cancer		
<i>Group 1 (carcinogenic to humans)</i>	E	30
<i>Group 2A (probably carcinogenic to humans)</i>	E	30
<i>Group 2B (possibly carcinogenic to humans)</i>	E	30
<i>Group 3 (not classifiable as to its carcinogenicity to humans)</i>	<i>No band</i>	<i>No score</i>
<i>Group 4 (probably not carcinogenic to humans)</i>	A	30
State of California Office of Environmental Health Hazard Assessment		
<i>Type of toxicity = cancer</i>	E	30

Worksheet for Cancer

Carcinogenicity (20 or 30 points possible)				
	Band A	Band C	Band D	Band E
NTP/EPA/IARC/Canada/California (QUALITATIVE)				
EPA IRIS Slope Factor				
EPA IRIS Inhalation Unit Risk				
Health Canada TD05				
Health Canada TC05				
California Slope Factor				
California Inhalation Unit Risk				