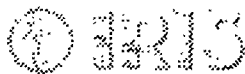




U.S. Environmental Protection Agency Integrated Risk Information System

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Asbestos (CASRN 1332-21-4)

Health assessment information on a chemical substance is included in IRIS only after a comprehensive review of toxicity data by U.S. EPA health scientists from several Program Offices, Regional Offices, and the Office of Research and Development.

Disclaimer: This QuickView represents a snapshot of key information. We suggest that you read the [Full IRIS Summary](#) to put this information into complete context.

For definitions of terms in the IRIS Web site, refer to the [IRIS Glossary](#).

Status of Data for Asbestos

File First On-Line: 09/26/1988

Last Significant Revision: 09/26/1988

Category	Status	Last Revised
Oral RfD Assessment	No data	
Inhalation RfC Assessment	No data	
Carcinogenicity Assessment	On-line	07/01/1993

PLAINTIFF'S
EXHIBIT
SA-557

Chronic Health Hazard Assessments for Noncarcinogenic Effects

Reference Dose for Chronic Oral Exposure (RfD)

Not Assessed under the IRIS Program.

Reference Concentration for Chronic Inhalation Exposure (RfC)

Not Assessed under the IRIS Program.

Carcinogenicity Assessment for Lifetime Exposure

Weight of Evidence Characterization

Weight of Evidence (1986 US EPA Guidelines):
A (Human Carcinogen)

Weight of Evidence Narrative:

Observation of increased mortality and incidence of lung cancer, mesotheliomas and gastrointestinal cancer in occupationally exposed workers are consistent across investigators and study populations. Animal studies by inhalation in two strains of rats showed similar findings for lung cancer and mesothelioma. Animal evidence for carcinogenicity is consistent with a limited human data for intermediate cancer

findings for lung cancer and mesotheliomas. Animal evidence for carcinogenicity via ingestion is limited (male rats fed intermediate-range chrysotile fibers; i.e., >10 μ m length, developed benign polyps), and epidemiologic data in this regard are inadequate.

This may be a synopsis of the full weight-of-evidence narrative. See [Full IRIS Summary](#)

Quantitative Estimate of Carcinogenic Risk from Oral Exposure

Not Assessed under the IRIS Program.

Quantitative Estimate of Carcinogenic Risk from Inhalation Exposure

Air Unit Risk(s)	Extrapolation Method
2.3x10 ⁻¹ per f/mL	Additive risk of lung cancer and mesothelioma, using relative risk model for lung cancer and absolute risk model for mesothelioma

Air Concentrations at Specified Risk Levels

Risk Level	Concentration
E-4 (1 in 10,000)	4x10 ⁻⁴ f/mL
E-5 (1 in 100,000)	4x10 ⁻⁵ f/mL
E-6 (1 in 1,000,000)	4x10 ⁻⁶ f/mL

Dose-Response Data (Carcinogenicity, Inhalation Exposure)

Tumor Type: Lung cancer and mesothelioma

Test Species: Human

Route: Inhalation, Occupational exposure

Reference: Selikoff et al., 1979; Peto et al., 1982; Seidman et al., 1979; Peto, 1980; Finkelstein, 1983

Revision History

Review Full IRIS Summary for complete [Revision History](#).

Synonyms

1332-21-4

Calidria-asbestos

Asbestos

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