



SOAPSTONE

CAS number: —

Synonyms: Mussolinite, Agalite, Asbestine, Snowgoose

Chemical formula: $\text{H}_2\text{Mg}_3\text{O}_{12}\text{Si}_4$

Workplace exposure standard (interim)

TWA: 6 mg/m³ (total dust)
3 mg/m³ (respirable fraction)

STEL: —

Peak limitation: —

Notations: —

IDLH: 3,000 mg/m³

Sampling and analysis: The recommended value is quantifiable through available sampling and analysis techniques.

Recommendation and basis for workplace exposure standard

The TWAs of 6 mg/m³ (total dust) and 3 mg/m³ (respirable fraction) are recommended to protect for effects on the respiratory system in exposed workers.

Given the limited data available from the primary sources, it is recommended that a review of additional sources be conducted at the next scheduled review.

Discussion and conclusions

Limited information is available. ACGIH (2018) withdrew its TWA in 2011 and recommended referring to Talc which has a TWA of 2.5 mg/m³. DFG (2006) list soapstone as a synonym for Talc. US NIOSH (1989) list the critical effects as pneumoconiosis, cough, dyspnoea, digital clubbing, cyanosis, basal crackles and *cor pulmonale*; and have recommended permissible exposure limits of 6 mg/m³ (total dust) and 3 mg/m³ (respirable dust) for soapstone. US NIOSH also reported Talc as a major constituent of soapstone and the toxic effects that are described in the literature result from chronic exposures to this substance (US NIOSH, 1989). No further information is available.

Given the absence of data, the TWA of 6 mg/m³ (total dust) and 3 mg/m³ (respirable fraction) are recommended to be retained in the interim. Consideration of the relationship to Talc and associated toxic effects is recommended at the next subsequent review.

Recommendation for notations

Not classified as a carcinogen according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Not classified as a skin sensitiser or respiratory sensitiser according to the GHS.

There are insufficient data to recommend a skin notation.

APPENDIX

Primary sources with reports

Source	Year set	Standard
SWA	1991	TWA: 6 mg/m³ TWA: 3 mg/m³ (respirable fraction)
Separate TWA for Talc (containing no asbestos) TLV-TWA 2.5 mg/m ³ .		
ACGIH	NA	NA
Withdrawn in 2011; refer to Talc – TWA-TLV 2 mg/m ³ .		
DFG	NA	NA
MAK value documentation for Talc (without asbestos fibres) (respirable fraction) list soapstone as a synonym for Talc.		
SCOEL	NA	NA
No report.		
OARS/AIHA	NA	NA
No report.		
HCOTN	NA	NA
No report.		

Secondary source reports relied upon

Source	Year	Additional information
IARC	✓ 1987	<ul style="list-style-type: none"> • Soapstone synonym for Talc.
US NIOSH	✓ 1989	<ul style="list-style-type: none"> • Critical effects Pneumoconiosis: cough, dyspnoea, digital clubbing; cyanosis; basal crackles, <i>cor pulmonale</i> • Talc is a major constituent of soapstone; toxic effects of Talc that are described in the literature result from chronic exposures to this substance. • PEL of 6 mg/m³ TWA (total dust) and 3 mg/m³ TWA (respirable dust) for soapstone.

Carcinogenicity — non-threshold based genotoxic carcinogens

Is the chemical mutagenic? Insufficient data

Is the chemical carcinogenic with a mutagenic mechanism of action? Insufficient data

Insufficient data are available to determine if the chemical is a non-threshold based genotoxic carcinogen.



Notations

Source	Notations
SWA	—
HCIS	NA
NICNAS	NA
EU Annex	NA
ECHA	NA
ACGIH	NA
DFG	Carcinogenicity – 3B (Talc)
SCOEL	NA
HCOTN	NA
IARC	NA
US NIOSH	NA

NA = not applicable (a recommendation has not been made by this Agency); — = the Agency has assessed available data for this chemical but has not recommended any notations

Skin notation assessment

Calculation

Insufficient data to recommend a skin notation.

IDLH

Is there a suitable IDLH value available? Yes

Additional information

Molecular weight:	379.27
Conversion factors at 25°C and 101.3 kPa:	1 ppm = Number mg/m ³ ; 1 mg/m ³ = Number ppm
This chemical is used as a pesticide:	<input type="checkbox"/>
This chemical is a biological product:	<input type="checkbox"/>
This chemical is a by-product of a process:	<input type="checkbox"/>
A biological exposure index has been recommended by these agencies:	<input type="checkbox"/> ACGIH <input type="checkbox"/> DFG <input type="checkbox"/> SCOEL

Workplace exposure standard history

Year	Standard
Click here to enter year	

References

American Conference of Industrial Hygienists (ACGIH®) (2018) TLVs® and BEIs® with 7th Edition Documentation, CD-ROM, Single User Version. Copyright 2018. Reprinted with permission. See the [TLVs® and BEIs® Guidelines section](#) on the ACGIH website.

Deutsche Forschungsgemeinschaft (DFG) (2006) Talc (without asbestos fibres) (respirable fraction) – MAK value documentation.

International Agency for Research on Cancer (IARC) Carbon Black, Titanium Dioxide and Talc. IARC Monographs – 93.

US National Institute for Occupational Safety and Health (NIOSH) (1994) Immediately dangerous to life or health concentrations – Soapstone.