

SAM FORBES

TLVs®

**THRESHOLD
LIMIT VALUES
and
BIOLOGICAL
EXPOSURE INDICES
for
1986-1987**



American
Conference
of Governmental
Industrial Hygienists

CBY 3102519

C 000178

LAM022088

DUSTS

Substance	TLV-TWA
<u>SILICA, SiO₂</u>	
<i>Crystalline</i>	
* Quartz ^(h) [14808-60-7]	0.1 mg/m ³ , Respirable dust
* Cristobalite [14464-46-1] Silica, fused [60676-86-0]	0.05 mg/m ³ , Respirable dust
* Tridymite [15468-32-3] Tripoli	0.1 mg/m ³ , Respirable dust
[1317-95-9]	0.05 mg/m ³ , Respirable dust
	0.1 mg/m ³ of contained respirable quartz dust.
<i>Amorphous</i>	
* Diatomaceous earth (uncalcined) ^(h) [68855-54-9]	10 mg/m ³ , Total dust
‡ Precipitated silica	(5 mg/m ³ , Respirable dust) 10 mg/m ³ , Total dust
‡ Silica gel	(5 mg/m ³ , Respirable dust) 10 mg/m ³ , Total dust
* <u>SILICATES⁽ⁱ⁾</u>	
<i>Asbestos^(j)</i>	
Amosite [12172-73-5]	0.5 fiber/cc, ^(k) A1a
Chrysotile [12001-29-5]	2 fibers/cc, ^(k) A1a
Crocidolite [12001-28-4]	0.2 fiber/cc, ^(k) A1a
Other forms	2 fibers/cc, ^(k) A1a
‡ Graphite (natural) [7782-42-5]	2.5 mg/m ³ , Respirable dust (5 mg/m ³ , Total dust)
* Mica [12001-25-2]	3 mg/m ³ , Respirable dust
Mineral wool fiber	10 mg/m ³
* Perlite	10 mg/m ³ , Total dust
* Portland cement	10 mg/m ³ , Total dust
Soapstone	3 mg/m ³ , Respirable dust 6 mg/m ³ , Total dust
Talc (containing no asbestos fibers) [14807-96-6]	2 mg/m ³ , Respirable dust
Talc (containing asbestos fibers)	Use asbestos TLV-TWA. However, should not exceed 2 mg/m ³ respirable dust.

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OTHER DUSTS

- * Barium sulfate [7727-43-7] 10 mg/m³, Total dust
- * Grain dust (oats, wheat, barley) 4 mg/m³, Total particulate
- * Graphite, synthetic 10 mg/m³, Total dust
- * Nuisance particulates (see Appendix D) 10 mg/m³, Total dust

‡ COAL DUST

- ‡ (2 mg/m³ (respirable dust fraction < 5% quartz). If > 5% quartz, use respirable quartz value.

FOOTNOTES FOR DUSTS

- (h) Both concentration and percent quartz (if applicable) for respirable dust for the application of this limit are to be determined from the fraction passing a size-selector with the characteristics defined in Appendix F.
- (i) For silicates, the values are for dust containing no asbestos and < 1% crystalline silica in the total dust. For coal dust, the value is for coal dust containing < 5% crystalline silica in the respirable fraction. For materials containing more than these percentages of crystalline silica, the environment should be evaluated against the TLV-TWA of 0.1 mg/m³ for respirable quartz. Even where the respirable quartz concentration is less than 0.1 mg/m³, the level of the major component should not exceed its TLV.
- (j) As determined by the membrane filter method at 400-450x magnification (4 mm objective) phase contrast illumination.
- (k) Fibers longer than 5 µm and with an aspect ratio equal to or greater than 3:1.

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