

TLVs®
Threshold Limit Values
for
Chemical Substances
and
Physical Agents
in the
Workroom Environment
with
Intended Changes
for
1979



C 000166

CBY 3102507

LAM022076

2. Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure." US Department of Commerce, National Bureau of Standards Handbook 69, issued June 5, 1959, with Addendum 1 issued August 1963. Available as NCRP Report No. 22.

The above documents, as well as information on numerous other NCRP Reports addressing specific subjects in ionizing radiation protection are available from: NCRP Publications, PO Box 30175, Washington, DC 20014.

MINERAL DUSTS

Substance SILICA, SiO₂

Crystalline

Quartz

TLV in mppcf^a:

300^a

% quartz + 10

TLV for respirable dust in
mg/m³:

10 mg/m³^a

% Respirable quartz + 2

TLV for "total dust," respirable
and nonrespirable:

30 mg/m³

% quartz + 3

Cristobalite Use one-half the value calculated
from the count or mass formulae
for quartz.

Tridymite Use one-half the value calculated
from formulae for quartz.

Silica, fused Use quartz formulae.

Tripoli Use respirable^a mass quartz for-
mula

**Amorphous (20 mppcf^a)

SILICATES (< 1% quartz)

**Asbestos, all forms

(5 fibers/cc >
5µm in
length^a; A1a)

Mica

20 mppcf

Mineral wool fiber

10 mg/m³

**See Notice of Intended Changes

Perlite	30 mppcf
Portland Cement	30 mppcf
Soapstone	20 mppcf
Talc (nonasbestiform)	20 mppcf

**Talc (fibrous), use Asbestos limit.

**Tremolite, see Asbestos.

COAL DUST

2 mg/m³ (respirable dust fraction < 5% quartz).

If > 5% quartz, use respirable mass formula.

NUISANCE PARTICULATES

(see Appendix E)

30 mppcf or 10 mg/m³^a

of total dust < 1% quartz, or, 5 mg/m³ respirable dust.

Conversion factors:

mppcf × 35.3 = Million particles per cubic meter
= particles per cc

- g) Millions of particles per cubic foot of air, based on impinger samples counted by light-field technics.
- h) The percentage of quartz in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.
- i) Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics:

Aerodynamic Diameter (µm) (unit density sphere)	% passing selector
≤ 2	90
2.5	75
3.5	50
5.0	25
10	0

- j) containing < 1% quartz; if quartz content > 1%, use formulae for quartz.
- k) Lint-free dust as measured by the vertical-elutriator, cotton-dust sampler described in the Transactions of

**See Notice of Intended Changes