Chloroform
CAS 67-66-3

Current North Carolina AAL = 4.3 x 10^{-3} mg/m^3 (annual carcinogen)

AAL Documentation

Inhalation Unit Risk\(^1\) (IUR) = 2.3 x 10^{-5} per µg/m^3

The Inhalation Unit Risk Factor was divided by 10 to compensate for animal to human extrapolation.

Modified IUR = \(\frac{2.3 \times 10^{-5}}{10}\) = 2.3 x 10^{-6} per µg/m^3

Chloroform is classified as a probable human carcinogen by EPA, Group B2. In accordance with North Carolina guidelines, a 1 in 100,000 risk estimate was used to derive the AAL.

Linear Calculation

\[
\frac{1}{2.3 \times 10^{-6} \text{ per µg/m}^3} = \frac{x}{1 \times 10^{-5}}
\]

\[
x = \frac{1 \times 10^{-5}}{2.3 \times 10^{-6}}
\]

\[
x = 4.3 \times 10^{0} \mu g/m^3
\]

AAL for Chloroform\(^2\) = 4.3 x 10^{-3} mg/m^3

This information has been reconstructed using the decision matrix established by the North Carolina Academy of Sciences Air Toxics Panel, September, 1986.

Final version- June 2013 (NBJ)

\(^1\) Health Assessment Document for EPA (September 1985), 600/8-84/004F. Estimated from an oral cancer potency slope factor of 0.081 (mg/kg-day)\(^\text{-1}\) using standard conversion assumptions of 20 m\(^3\) daily breathing rate and 70 kg average body weight.

\(^2\) 1 µg/m\(^3\) = 10\(^{-3}\) mg/m\(^3\)