Benzene
CAS 71-43-2

Current North Carolina AAL = $1.2 \times 10^{-4}$ mg/m$^3$ (annual, carcinogen)

AAL Documentation

Inhalation Unit Risk (IUR) $^1 = 8.1 \times 10^{-6}$ per µg/m$^3$

Known human carcinogen by EPA, Group A
AAL based on $10^{-6}$ risk

Linear Calculation

\[
\frac{1}{8.1 \times 10^{-6} \text{ per } \mu g/m^3} = \frac{x}{1 \times 10^{-6}}
\]

\[
x = \frac{1 \times 10^{-6}}{8.1 \times 10^{-6}}
\]

\[
x = 1.2 \times 10^{-1} \mu g/m^3
\]

AAL for benzene$^2 = 1.2 \times 10^{-4}$ 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 (CMP)

$^1$ Quantitative Cancer Unit Risk Estimates due to Inhalation of Benzene, EPA Carcinogen Assessment Group Internal Report, 1985 (EPA/600/X-85-022). IUR based on occupational study data.

$^2$ 1 µg/m$^3 = 10^{-3}$ mg/m$^3$