

S-3. Inhalation Health Benchmarks (IHBs)

Inhalation Health Benchmarks (IHBs) are used for the development of the screening threshold values. The IHBs used to calculate screening threshold values are cancer values based on inhalation unit risks (IURs) or noncancer reference concentrations (RfCs).

The IUR is an estimate of the increased cancer risk from a population's continuous inhalation exposure to 1 mg/m³ of a chemical for a lifetime. Most cancer risk values are also adjusted for early-life sensitivity, with an age dependent adjustment factor (ADAF), to derive an air guidance value associated with a negligible cancer risk over a lifetime. The 1 in 100,000 population excess cancer risk is calculated by dividing 0.00001 (or 10⁻⁵) by the IUR.

RfCs are an estimate of an air concentration likely to be without health risk for the continuous inhalation exposure to the human population, including sensitive subgroups, over a specified time period. For annual (or chronic) thresholds either IUR cancer values or RfCs are used where available. If a chemical has both a cancer value and a RfC, then the lower value is used to calculate the screening threshold value. RfCs used to calculate the annual threshold value are denoted with the subscript chronic (RfC_{chronic}).

Acute thresholds are based on 1-hr or 24-hr exposure duration RfCs. These are evaluated against the 1-hr or 24-hr dispersion values, respectively, and are denoted with the subscript acute (RfC_{acute}). Table 9 in SONAR Exhibit 2 details whether RfC_{acute} value is using the 1-hr or 24-hr dispersion value.

Acetaldehyde CAS # 75-07-0

Acute (RfC_{acute})

470 µg/m³ <https://oehha.ca.gov/chemicals/acetaldehyde>. Retrieved on December 16, 2024.

Cancer Value

IUR = 2.70E-06 (µg/m³)⁻¹ or cancer value = 4.55 µg/m³ https://iris.epa.gov/static/pdfs/0290_summary.pdf. Retrieved on December 16, 2024.

Acetamide CAS # 60-35-5

Cancer Value

IUR = 2.00E-05 (µg/m³)⁻¹ or cancer value = 0.5 µg/m³ <https://oehha.ca.gov/chemicals/acetamide>. Retrieved on December 30, 2024.

Acetone CAS # 67-64-1

Acute (RfC_{acute})

19,000 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp21.pdf>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

20,000 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Acetonitrile CAS # 75-05-8

Chronic (RfC_{chronic})

60 µg/m³ https://iris.epa.gov/static/pdfs/0205_summary.pdf. Retrieved on December 31, 2024.

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Acetylaminofluorene, 2- CAS # 53-96-3

Cancer Value

IUR = $1.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $7.70E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/2-acetylaminofluorene>. Retrieved on December 31, 2024.

Acrolein CAS # 107-02-8

Acute (RfC_{acute})

5 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/acrolein.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

0.40 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/acrolein.pdf>. Retrieved on December 30, 2024.

Acrylamide CAS # 79-06-1

Cancer Value

IUR = $1.00E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.1 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/2-acetylaminofluorene>. Retrieved on December 31, 2024.

Acrylic acid CAS #79-10-7

Acute (RfC_{acute})

$6,000$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/acrylic-acid>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

1 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0002_summary.pdf. Retrieved on December 31, 2024.

Acrylonitrile CAS # 107-13-1

Cancer Value

IUR = $6.80E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.15 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0206_summary.pdf. Retrieved on December 30, 2024.

Aldehydes

Acute (RfC_{acute})

50 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/formaldehyde.pdf>. Retrieved on December 30, 2024.

Cancer Value

IUR = $2.20E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 4.55 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0290_summary.pdf. Retrieved on December 16, 2024.

Aldrin CAS # 309-00-2

Cancer Value

IUR = $4.90E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.04E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0130_summary.pdf. Retrieved on November 10, 2025.

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Allyl chloride CAS # 107-05-1

Chronic (RfC_{chronic})

1 µg/m³ https://iris.epa.gov/static/pdfs/0387_summary.pdf. Retrieved on December 31, 2024.

Aluminum CAS # 7429-90-5

Chronic (RfC_{chronic})

5 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/Aluminum.pdf>. Retrieved on December 31, 2024.

Aluminum Compounds CAS # ALUMINUM-COMPS

Chronic (RfC_{chronic})

5 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/Aluminum.pdf>. Retrieved on December 31, 2024.

Amino-2-methylantraquinone, 1- CAS # 82-28-0

Cancer Value

IUR = 4.30E-05 (µg/m³)⁻¹ or cancer value = 0.23 µg/m³ <https://oehha.ca.gov/chemicals/1-amino-2-methylantraquinone>. Retrieved on December 31, 2024.

Aminoanthraquinone, 2- CAS # 117-79-3

Cancer Value

IUR = 9.40E-06 (µg/m³)⁻¹ or cancer value = 1.1 µg/m³ <https://oehha.ca.gov/chemicals/2-aminoanthraquinone>. Retrieved on December 31, 2024.

Aminoazotoluene, o- (C.I. Solvent Yellow 3) CAS # 97-56-3

Cancer Value

IUR = 1.10E-03 (µg/m³)⁻¹ or cancer value = 9.09E-03 µg/m³ <https://oehha.ca.gov/chemicals/o-aminoazotoluene>. Retrieved on December 31, 2024.

Aminobiphenyl, 4- CAS # 92-67-1

Cancer Value

IUR = 6.00E-03 (µg/m³)⁻¹ or cancer value = 1.67E-03 µg/m³ <https://oehha.ca.gov/chemicals/4-aminobiphenyl>. Retrieved on December 31, 2024.

Ammonia CAS # 7664-41-7

Acute (RfC_{acute})

11,800 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp126.pdf>. Retrieved on December 17, 2024.

Chronic (RfC_{chronic})

500 µg/m³ https://iris.epa.gov/static/pdfs/0422_summary.pdf. Retrieved on December 31, 2024.

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Aniline CAS # 62-53-3

Chronic (RfC_{chronic})

1 µg/m³ https://iris.epa.gov/static/pdfs/0350_summary.pdf. Retrieved on December 31, 2024.

Anisidine, o- CAS # 90-04-0

Cancer Value

IUR = 4.00E-05 (µg/m³)⁻¹ or cancer value = 0.25 µg/m³ <https://oehha.ca.gov/chemicals/o-anisidine>. Retrieved on December 31, 2024.

Antimony CAS # 7440-36-0

Acute (RfC_{acute})

1 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp23.pdf>. Retrieved on December 17, 2024.

Chronic (RfC_{chronic})

0.3 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp23.pdf>. Retrieved on December 17, 2024.

Antimony Compounds CAS # ANTIMONY-COMPS

Acute (RfC_{acute})

1 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp23.pdf>. Retrieved on December 17, 2024.

Chronic (RfC_{chronic})

0.3 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp23.pdf>. Retrieved on December 17, 2024.

Antimony trioxide CAS # 1309-64-4

Chronic (RfC_{chronic})

0.2 µg/m³ https://iris.epa.gov/static/pdfs/0676_summary.pdf. Retrieved on December 31, 2024.

Aramite CAS # 140-57-8

Cancer Value

IUR = 7.10E-06 (µg/m³)⁻¹ or cancer value = 1.4 µg/m³ https://iris.epa.gov/static/pdfs/0473_summary.pdf. Retrieved on December 30, 2024.

Arsenic CAS # 7440-38-2

Acute (RfC_{acute})

0.2 µg/m³ <https://oehha.ca.gov/chemicals/arsenic>. Retrieved on December 16, 2024.

Cancer Value

IUR = 4.30E-03 (µg/m³)⁻¹ or cancer value = 2.33E-03 µg/m³ https://iris.epa.gov/static/pdfs/0278_summary.pdf. Retrieved on December 30, 2024.

Arsenic Compounds CAS # ARSENIC-COMPS

Acute (RfC_{acute})

0.2 µg/m³ <https://oehha.ca.gov/chemicals/arsenic>. Retrieved on December 16, 2024.

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Cancer Value

IUR = $4.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.33E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0278_summary.pdf. Retrieved on December 30, 2024.

Arsenic (V) oxide CAS # 1303-28-2

Acute (RfC_{acute})

0.2 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/arsenic>. Retrieved on December 16, 2024.

Cancer Value

IUR = $4.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.33E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0278_summary.pdf. Retrieved on December 30, 2024.

Arsenic Trioxide CAS # 1327-53-3

Acute (RfC_{acute})

0.2 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/arsenic>. Retrieved on December 16, 2024.

Cancer Value

IUR = $4.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.33E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0278_summary.pdf. Retrieved on December 30, 2024.

Arsine CAS # 7784-42-1

Acute (RfC_{acute})

0.2 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/arsenic>. Retrieved on December 16, 2024.

Cancer Value

IUR = $4.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.33E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0278_summary.pdf. Retrieved on December 30, 2024.

Asbestos CAS # 1332-21-4

Cancer Value

IUR = $2.30E-07$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 43 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0371_summary.pdf. Retrieved on December 30, 2024.

Auramine (C.I. Solvent Yellow 34) CAS # 492-80-8

Cancer Value

IUR = $2.50E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/auramine>. Retrieved on December 31, 2024.

Azobenzene CAS # 103-33-3

Cancer Value

IUR = $3.10E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.32 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0351_summary.pdf. Retrieved on December 30, 2024.

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Barium Chromate CAS # 10294-40-3

Cancer Value

IUR = $1.11\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Benz[a]anthracene CAS # 56-55-3

Cancer Value

IUR = $1.10\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/benzaanthracene>. Retrieved on February 23, 2025.

Benzene CAS # 71-43-2

Acute (RfC_{acute})

30 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/benzene.pdf>. Retrieved on December 30, 2024.

Cancer Value

IUR = $1.30\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.8 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/benzene.pdf>. Retrieved on December 30, 2024.

Benzidine CAS # 92-87-5

Cancer Value

IUR = $6.70\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.49\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0135_summary.pdf. Retrieved on December 30, 2024.

Benzo(j)fluoranthene CAS # 205-82-3

Cancer Value

IUR = $1.10\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/benzojfluoranthene>. Retrieved on February 23, 2025.

Benzo(k)fluoranthene CAS # 207-08-9

Cancer Value

IUR = $1.10\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/benzokfluoranthene>. Retrieved on February 23, 2025.

Benzo[a]pyrene CAS # 50-32-8

Cancer Value

IUR = $6.00\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.67\text{E-}02$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0136_summary.pdf. Retrieved on February 23, 2025.

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Benzo[b]fluoranthene CAS # 205-99-2

Cancer Value

IUR = $1.10\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/benzobfluoranthene>. Retrieved on February 23, 2025.

Benzyl chloride CAS # 100-44-7

Acute (RfC_{acute})

240 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/benzyl-chloride>. Retrieved on December 16, 2024.

Cancer Value

IUR = $4.90\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.04\text{E-}01$ $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 30, 2024.

Beryllium CAS # 7440-41-7

Cancer Value

IUR = $2.40\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.17\text{E-}03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0012_summary.pdf. Retrieved on December 30, 2024.

Beryllium Compounds CAS # BERYLLIUM-COMPS

Cancer Value

IUR = $2.40\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.17\text{E-}03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0012_summary.pdf. Retrieved on December 30, 2024.

Beryllium Oxide CAS # 1304-56-9

Cancer Value

IUR = $2.40\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.17\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/beryllium-oxide>. Retrieved on December 31, 2024.

Beryllium sulfate CAS # 13510-49-1

Cancer Value

IUR = 0.86 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.20\text{E-}05$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/beryllium-sulfate>. Retrieved on December 31, 2024.

Bis(2-chloroethyl)ether CAS # 111-44-4

Cancer Value

IUR = $3.30\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.03 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0137_summary.pdf. Retrieved on December 30, 2024.

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Bis(2-ethylhexyl)phthalate (DEHP) CAS # 117-81-7

Cancer Value

IUR = $2.40E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 4.2 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/di2-ethylhexylphthalate>. Retrieved on October 13, 2025.

Bis(chloromethyl)ether CAS # 542-88-1

Cancer Value

IUR = $6.20E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.61E-04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0375_summary.pdf. Retrieved on December 30, 2024.

Bromobenzene CAS # 180-86-1

Chronic (RfC_{chronic})

60 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/1020_summary.pdf. Retrieved on December 31, 2024.

Bromoform CAS # 75-25-2

Cancer Value

IUR = $1.10E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.1 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0214_summary.pdf. Retrieved on December 30, 2024.

Bromomethane CAS # 74-83-9

Acute (RfC_{acute})

$3,900$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/methyl-bromide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

4 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Bromopropane, 1- CAS # 106-94-5

Acute (RfC_{acute})

100 $\mu\text{g}/\text{m}^3$
<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/1bromopropane.pdf>. Retrieved on December 30, 2024.

Cancer Value

IUR = $1.55E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 6 $\mu\text{g}/\text{m}^3$
<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/1bromopropane.pdf>. Retrieved on December 30, 2024.

Butadiene, 1,3- CAS # 106-99-0

Acute (RfC_{acute})

660 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/13-butadiene>. Retrieved on October 13, 2025.

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Cancer Value

IUR = $3.60E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.28 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on October 13, 2025.

Butyl Cellosolve (ethylene glycol monobutyl ether) CAS # 111-76-2

Acute (RfC_{acute})

29,000 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp118.pdf>. Retrieved on December 17, 2024.

Chronic (RfC_{chronic})

1,600 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0500_summary.pdf. Retrieved on January 2, 2025.

Cadmium CAS # 7440-43-9

Acute (RfC_{acute})

0.03 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp5.pdf>. Retrieved on December 17, 2024.

Cancer Value

IUR = $1.80E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.56E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0141_summary.pdf. Retrieved on December 30, 2024.

Cadmium Compounds CAS # CADMIUM-COMPS

Acute (RfC_{acute})

0.03 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp5.pdf>. Retrieved on December 17, 2024.

Cancer Value

IUR = $1.80E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.56E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0141_summary.pdf. Retrieved on December 30, 2024.

Cadmium Oxide CAS # 1306-19-0

Acute (RfC_{acute})

0.03 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp5.pdf>. Retrieved on December 17, 2024.

Cancer Value

IUR = $1.80E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.56E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0141_summary.pdf. Retrieved on December 30, 2024.

Calcium Chromate CAS # 13765-19-0

Cancer Value

IUR = $1.11E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01E-04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Caprolactam CAS # 105-60-2

Acute (RfC_{acute})

50 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/caprolactam>. Retrieved on December 16, 2024.

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Chronic (RfC_{chronic})

2.2 µg/m³ <https://oehha.ca.gov/chemicals/caprolactam>. Retrieved on December 16, 2024.

Captan CAS # 133-06-2

Cancer Value

IUR = 6.60E-07 (µg/m³)⁻¹ or cancer value = 15.15 µg/m³ <https://oehha.ca.gov/chemicals/captan>. Retrieved on December 31, 2024.

Carbon disulfide CAS # 75-15-0

Acute (RfC_{acute})

600 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp82.pdf>. Retrieved on January 22, 2026.

Chronic (RfC_{chronic})

800 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Carbon tetrachloride CAS # 56-23-5

Acute (RfC_{acute})

1,900 µg/m³ <https://oehha.ca.gov/chemicals/carbon-tetrachloride>. Retrieved on December 16, 2024.

Cancer Value

IUR = 6.0E-06 (µg/m³)⁻¹ or cancer value = 1.7 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 30, 2024.

Carbonyl sulfide CAS # 463-58-1

Acute (RfC_{acute})

660 µg/m³ <https://oehha.ca.gov/chemicals/carbonyl-sulfide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

100 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/CarbonylSulfide.pdf>. Retrieved on December 31, 2024.

Cellosolve Acetate (ethylene glycol monoethyl ether acetate) CAS # 111-15-9

Acute (RfC_{acute})

140 µg/m³ <https://oehha.ca.gov/chemicals/ethylene-glycol-monoethyl-ether-acetate>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

60 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/EthoxyethanolAcetate.pdf>. Retrieved on December 31, 2024.

Cerium Oxide CAS # 1306-38-3

Chronic (RfC_{chronic})

0.90 µg/m³ https://iris.epa.gov/static/pdfs/1018_summary.pdf. Retrieved on December 31, 2024.

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Chlordane CAS # 57-74-9

Cancer Value

IUR = $3.40\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.94\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/chlordane>. Retrieved on November 10, 2025.

Chlordane, technical CAS # 12789-03-6

Cancer Value

IUR = $1.00\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.10 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0142_summary.pdf. Retrieved on November 10, 2025.

Chlorine CAS # 7782-50-5

Acute (RfC_{acute})

170 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp172.pdf>. Retrieved on December 17, 2024.

Chronic (RfC_{chronic})

0.15 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp172.pdf>. Retrieved on December 17, 2024.

Chlorine Dioxide CAS # 10049-04-4

Chronic (RfC_{chronic})

0.20 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0496_summary.pdf. Retrieved on December 31, 2024.

Chloro-1,1-difluoroethane, 1- CAS # 75-68-3

Chronic (RfC_{chronic})

$50,000$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0661_summary.pdf. Retrieved on December 31, 2024.

Chloro-2-methylpropene, 3- CAS # 563-47-3

Cancer Value

IUR = $4.0\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.25 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/3-chloro-2-methylpropene>. Retrieved on December 31, 2024.

Chloroacetophenone, 2- CAS # 532-27-4

Chronic (RfC_{chronic})

0.03 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0537_summary.pdf. Retrieved on December 31, 2024.

Chlorobenzene CAS # 108-90-7

Chronic (RfC_{chronic})

50 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chlorobenzilate CAS # 510-15-6

Cancer Value

IUR = $3.15E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.32 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ethyl-4-4-dichlorobenzilate>. Retrieved on December 31, 2024.

Chlorodifluoromethane CAS # 75-45-6

Chronic (RfC_{chronic})

$50,000$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0657_summary.pdf. Retrieved on December 31, 2024.

Chloroform CAS # 67-66-3

Acute (RfC_{acute})

5 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp6.pdf>. Retrieved on December 17, 2024.

Cancer Value

IUR = $2.30E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.43 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0025_summary.pdf. Retrieved on December 30, 2024.

Chloromethyl Methyl Ether CAS # 107-30-2

Cancer Value

IUR = $6.90E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.45E-02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/chloromethyl-methyl-ether-technical-grade>. Retrieved on December 31, 2024.

Chloroprene CAS # 126-99-8

Cancer Value

IUR = $3.00E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.03 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/1021_summary.pdf. Retrieved on December 30, 2024.

Chromic Acid CAS # 7738-94-5

Cancer Value

IUR = $1.25E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $8.00E-04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Chromic Trioxide CAS # 1333-82-0

Cancer Value

IUR = $1.11E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01E-04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Chromium CAS # 7440-47-3

Cancer Value

IUR = $1.11E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01E-04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

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Chromium VI CAS # 18540-29-9

Cancer Value

IUR = $1.11\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Chromium VI Compounds CAS # CHROMVI-COMPS

Cancer Value

IUR = $1.11\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Chrysene CAS # 218-01-9

Cancer Value

IUR = $1.10\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}01$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/chrysene>. Retrieved on February 23, 2025.

Cis-1,3-Dichloropropene CAS # 10061-01-5

Cancer Value

IUR = $4.00\text{E-}06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value 2.5 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on October 14, 2025.

Coal Tar CAS # 8007-45-2

Cancer Value

IUR = $6.20\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.61\text{E-}02$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0395_summary.pdf. Retrieved on December 30, 2024.

Cobalt CAS # 7440-48-4

Acute (RfC_{acute})

0.3 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp33.pdf>. Retrieved on December 18, 2024.

Cancer Value

IUR = $9.00\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.10\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/Cobalt.pdf>. Retrieved on December 30, 2024.

Cobalt Compounds CAS # COBALT-COMPS

Acute (RfC_{acute})

0.3 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp33.pdf>. Retrieved on December 18, 2024.

Cancer Value

IUR = $9.00\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.10\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/Cobalt.pdf>. Retrieved on December 30, 2024.

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Cobalt (II) oxide CAS # 1307-96-6

Cancer Value

IUR = $7.70E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.30E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cobalt-ii-oxide>. Retrieved on October 14, 2025.

Cobalt sulfate CAS # 10124-43-3

Cancer Value

IUR = $1.00E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.00E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cobalt-sulfate>. Retrieved on October 14, 2025.

Coke Oven Emissions

Cancer Value

IUR = $6.20E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.61E-02$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0395_summary.pdf. Retrieved on December 30, 2024.

Copper CAS # 7440-50-8

Acute (RfC_{acute})

100 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/copper>. Retrieved on December 16, 2024.

Copper Compounds CAS # COPPER-COMPS

Acute (RfC_{acute})

100 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/copper>. Retrieved on December 16, 2024.

Cresol, m- CAS # 108-39-4

Chronic (RfC_{chronic})

600 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cresol-mixtures>. Retrieved on January 2, 2025.

Cresol, o- CAS # 95-48-7

Chronic (RfC_{chronic})

600 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cresol-mixtures>. Retrieved on January 2, 2025.

Cresol, p- CAS # 106-44-5

Chronic (RfC_{chronic})

600 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cresol-mixtures>. Retrieved on January 2, 2025.

Cresols/Cresylic acid CAS # 1319-77-3

Chronic (RfC_{chronic})

600 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cresol-mixtures>. Retrieved on January 2, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Cumene CAS # 98-82-8

Chronic (RfC_{chronic})

400 µg/m³ https://iris.epa.gov/static/pdfs/0306_summary.pdf. Retrieved on December 31, 2024.

Cyanide CAS # 57-12-5

Acute (RfC_{acute})

340 µg/m³ <https://oehha.ca.gov/chemicals/cyanide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.8 µg/m³ https://iris.epa.gov/static/pdfs/0060_summary.pdf. Retrieved on October 14, 2025.

Cyanide Compounds CAS # CYANIDE-COMPS

Acute (RfC_{acute})

340 µg/m³ <https://oehha.ca.gov/chemicals/cyanide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.8 µg/m³ https://iris.epa.gov/static/pdfs/0060_summary.pdf. Retrieved on October 14, 2025.

Cyclohexane CAS # 110-82-7

Chronic (RfC_{chronic})

6,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Diaminodiphenyl ether, 4,4- CAS # 101-80-4

Cancer Value

IUR = 4.00E-05 (µg/m³)⁻¹ or cancer value = 0.25 µg/m³ <https://oehha.ca.gov/chemicals/44-diaminodiphenyl-ether>. Retrieved on December 31, 2024.

Dibenz(a,h)acridine CAS # 226-36-8

Cancer Value

IUR = 1.10E-04 (µg/m³)⁻¹ or cancer value = 9.09E-02 µg/m³ <https://oehha.ca.gov/chemicals/dibenzahacridine>. Retrieved on February 23, 2025.

Dibenz(a,j)acridine CAS # 224-42-0

Cancer Value

IUR = 1.10E-04 (µg/m³)⁻¹ or cancer value = 9.09E-02 µg/m³ <https://oehha.ca.gov/chemicals/dibenzajacridine>. Retrieved on February 23, 2025.

Dibenz[a,h]anthracene CAS # 53-70-3

Cancer Value

IUR = 1.20E-03 (µg/m³)⁻¹ or cancer value = 8.33E-03 µg/m³ <https://oehha.ca.gov/chemicals/dibenzanthracene>. Retrieved on February 23, 2025.

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Dibenzo(a,e)pyrene CAS # 192-65-4

Cancer Value

IUR = $1.10E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/dibenzoaepyrene>. Retrieved on February 23, 2025.

Dibenzo(a,h)pyrene CAS # 189-64-0

Cancer Value

IUR = $1.10E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09E-04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/dibenzoahpyrene>. Retrieved on February 23, 2025.

Dibenzo(a,l)pyrene CAS # 191-30-0

Cancer Value

IUR = $1.10E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09E-04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/dibenzoalpyrene>. Retrieved on February 23, 2025.

Dibenzo(c,g)carbazole, 7H- CAS # 194-59-2

Cancer Value

IUR = $1.10E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/7h-dibenzocgcarbazole>. Retrieved on February 23, 2025.

Dibenzo[a,i]pyrene CAS # 189-55-9

Cancer Value

IUR = $1.10E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09E-04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/dibenzoaiipyrene>. Retrieved on February 23, 2025.

Dibromo-3-chloropropane, 1,2- CAS # 96-12-8

Cancer Value

IUR = $6,000$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.67E-09$ $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/Dibromo3Chloropropane12.pdf>. Retrieved on November 10, 2025.

Dichlorobenzene(p), 1,4- CAS # 106-46-7

Acute (RfC_{acute})

$12,000$ $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp10.pdf>. Retrieved on December 18, 2024.

Cancer Value

IUR = $1.10E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.91 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/14-dichlorobenzene>. Retrieved on December 30, 2024.

Dichlorobenzenes CAS # 25321-22-6

Acute (RfC_{acute})

$12,000$ $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp10.pdf>. Retrieved on December 18, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Cancer Value

IUR = $1.10E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.91 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/14-dichlorobenzene>. Retrieved on December 30, 2024.

Dichlorobenzidene, 3,3- CAS # 91-94-1

Cancer Value

IUR = $3.40E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/33-dichlorobenzidine>. Retrieved on December 31, 2024.

Dichlorodiphenyldichloroethylene (DDE) CAS # 72-55-9

Cancer Value

IUR = $9.70E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.10 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/dichlorodiphenyldichloroethylene-dde>. Retrieved on December 31, 2024.

Dichlorodiphenyltrichloroethane, p, p' - (DDT) CAS # 50-29-3

Cancer Value

IUR = $9.70E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.10 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0147_summary.pdf. Retrieved on December 31, 2024.

Dichloroethylene (1,1-) (Vinylidene chloride) CAS # 75-35-4

Chronic (RfC_{chronic})

200 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Dichloroethylene, cis-1,2- CAS # 156-59-2

Chronic (RfC_{chronic})

40 $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/Dichloroethylenecis12.pdf>. Retrieved on December 31, 2024.

Dichloroethylene, trans-1,2- CAS # 156-60-5

Acute (RfC_{acute})

$12,000$ $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp87.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

20 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/tdcesumm.pdf>. Retrieved on January 2, 2025.

Dichloropropene, 1,3- CAS # 542-75-6

Cancer Value

IUR = $4.00E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.5 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0224_summary.pdf. Retrieved on October 14, 2025.

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Dichlorvos CAS # 62-73-7

Acute (RfC_{acute})

18 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp88.pdf>. Retrieved on December 18, 2024.

Cancer Value

IUR = 8.30E-05 (µg/m³)⁻¹ or cancer value = 0.12 µg/m³ <https://oehha.ca.gov/chemicals/dichlorvos>. Retrieved on December 30, 2024.

Diethanolamine CAS # 111-42-2

Chronic (RfC_{chronic})

0.20 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/Diethanolamine.pdf>. Retrieved on December 31, 2024.

Diethylene Glycol Monobutyl Ether CAS # 112-34-5

Chronic (RfC_{chronic})

0.10 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/degbesumm.pdf>. Retrieved on April 7, 2026.

Diethylene Glycol Monoethyl Ether CAS # 111-90-0

Chronic (RfC_{chronic})

2 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/degeesumm.pdf>. Retrieved on April 7, 2026.

Dimethyl aminoazobenzene CAS # 60-11-7

Cancer Value

IUR = 1.30E-03 (µg/m³)⁻¹ or cancer value = 7.70E-03 µg/m³ <https://oehha.ca.gov/chemicals/4-dimethylaminoazobenzene>. Retrieved on December 31, 2024.

Dimethyl formamide CAS # 68-12-2

Chronic (RfC_{chronic})

30 µg/m³ https://iris.epa.gov/static/pdfs/0511_summary.pdf. Retrieved on December 31, 2024.

Dimethylbenz[a]anthracene, 7,12- CAS # 57-97-6

Cancer Value

IUR = 7.10E-02 (µg/m³)⁻¹ or cancer value = 1.41E-04 µg/m³ <https://oehha.ca.gov/chemicals/712-dimethylbenzaanthracene>. Retrieved on February 23, 2025.

Dimethylcarbamoyl Chloride CAS # 79-44-7

Cancer Value

IUR = 3.70E-03 (µg/m³)⁻¹ or cancer value = 2.70E-03 µg/m³ <https://oehha.ca.gov/chemicals/dimethylcarbamoyl-chloride>. Retrieved on December 31, 2024.

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Dinitropyrene, 1,6- (BaP) CAS # 42397-64-8

Cancer Value

IUR = $1.10\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/16-dinitropyrene>. Retrieved on February 23, 2025.

Dinitropyrene, 1,8- (BaP) CAS # 42397-65-9

Cancer Value

IUR = $1.10\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/18-dinitropyrene>. Retrieved on February 23, 2025.

Dinitrotoluene, 2,4- CAS # 121-14-2

Cancer Value

IUR = $8.90\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.11 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/24-dinitrotoluene>. Retrieved on December 31, 2024.

Dioxane, 1,4- (1,4-Diethylene dioxide) CAS # 123-91-1

Acute (RfC_{acute})

$7,200$ $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp187.pdf>. Retrieved on December 19, 2024.

Cancer Value

IUR = $5.00\text{E-}06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0326_summary.pdf. Retrieved on October 14, 2025.

Diphenylhydrazine, 1,2- CAS # 112-66-7

Cancer Value

IUR = $2.20\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.55\text{E-}02$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0049_summary.pdf. Retrieved on October 14, 2025.

Direct Black 38 CAS # 1937-37-7

Cancer Value

IUR = $2.10\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.76\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/direct-black-38-technical-grade>. Retrieved on December 31, 2024.

Direct Blue 6 CAS # 2602-46-2

Cancer Value

IUR = $2.10\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $4.76\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/direct-blue-6-technical-grade>. Retrieved on December 31, 2024.

Direct Brown 95 CAS # 16071-86-6

Cancer Value

IUR = $1.90\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.26\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/direct-brown-95-technical-grade>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Epichlorohydrin (1-Chloro-2,3-epoxypropane) CAS # 106-89-8

Acute (RfC_{acute})

1,300 µg/m³ <https://oehha.ca.gov/chemicals/epichlorohydrin>. Retrieved on December 16, 2024.

Cancer Value

IUR = 1.20E-06 (µg/m³)⁻¹ or cancer value = 8.33 µg/m³ https://iris.epa.gov/static/pdfs/0050_summary.pdf. Retrieved on December 30, 2024.

Epoxybutane, 1,2- CAS # 106-88-7

Chronic (RfC_{chronic})

20 µg/m³ https://iris.epa.gov/static/pdfs/0630_summary.pdf. Retrieved on December 31, 2024.

Ethoxyethanol, 2- (ethylene glycol monoethyl ether) CAS # 110-80-5

Acute (RfC_{acute})

370 µg/m³ <https://oehha.ca.gov/chemicals/ethylene-glycol-monoethyl-ether>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

200 µg/m³ https://iris.epa.gov/static/pdfs/0513_summary.pdf. Retrieved on December 31, 2024.

Ethyl Acrylate CAS # 140-88-5

Chronic (RfC_{chronic})

8 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/EthylAcrylate.pdf>. Retrieved on December 31, 2024.

Ethylbenzene CAS # 100-41-4

Acute (RfC_{acute})

21,700 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp110.pdf>. Retrieved on December 19, 2024.

Cancer Value

IUR = 2.50E-06 (µg/m³)⁻¹ or cancer value = 4 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 30, 2024.

Ethyl carbamate (Urethane) CAS # 51-79-6

Cancer Value

IUR = 2.90E-04 (µg/m³)⁻¹ or cancer value = 0.034 µg/m³ <https://oehha.ca.gov/chemicals/urethane>. Retrieved on December 31, 2024.

Ethyl chloride (Chloroethane) CAS # 75-00-3

Acute (RfC_{acute})

34,000 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp105.pdf>. Retrieved on December 19, 2024.

Chronic (RfC_{chronic})

4,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Ethyl tertiary-butyl ether (ETBE) CAS # 637-92-3

Cancer Value

IUR = $8.00E-08$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 130 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/1034_summary.pdf. Retrieved on December 30, 2024.

Ethylene dibromide (Dibromoethane) CAS # 106-93-4

Cancer Value

IUR = $6.00E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$
<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Ethylene dichloride (1,2-Dichloroethane) CAS # 107-06-2

Acute (RfC_{acute})

400 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp38.pdf>. Retrieved on October 14, 2025.

Cancer Value

IUR = $2.60E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.38 $\mu\text{g}/\text{m}^3$
<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Ethylene glycol CAS # 107-21-1

Acute (RfC_{acute})

$2,000$ $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp96.pdf>. Retrieved on October 14, 2025.

Chronic (RfC_{chronic})

400 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ethylene-glycol-monoethyl-ether>. Retrieved on January 2, 2025.

Ethylene oxide CAS # 75-21-8

Acute (RfC_{acute})

50 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/etosumm.pdf>. Retrieved on October 14, 2025.

Cancer Value

IUR = $5.00E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.00E-03$ $\mu\text{g}/\text{m}^3$
<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/etosumm.pdf>. Retrieved on October 14, 2025.

Ethylene thiourea CAS # 96-45-7

Cancer Value

IUR = $1.30E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.77 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ethylene-thiourea>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Ethyleneimine CAS # 151-56-4

Cancer Value

IUR = $1.90E-02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.26E-04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ethyleneimine>. Retrieved on December 31, 2024.

Ethylidene dichloride (1,1-Dichloroethane) CAS # 75-34-3

Cancer Value

IUR = $1.60E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 6.3 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/11-dichloroethane>. Retrieved on December 31, 2024.

Formaldehyde CAS # 50-00-0

Acute (RfC_{acute})

50 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/formaldehyde.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

7 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/formaldehyde.pdf>. Retrieved on December 30, 2024.

Glycol ethers CAS # GLYCOL ETHERS-COMPS

Acute (RfC_{acute})

93 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ethylene-glycol-monomethyl-ether>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.10 $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/DiethyleneGlycolMonobutylEther.pdf>. Retrieved on December 31, 2024.

Heptachlor CAS # 76-44-8

Cancer Value

IUR = $1.30E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $7.69E-03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0243_summary.pdf. Retrieved on November 10, 2025.

Heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8- CAS # 35822-46-9

Cancer Value

IUR = 4 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.50E-06$ $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Heptachlorodibenzofuran, 1,2,3,4,6,7,8- CAS # 67562-39-4

Cancer Value

IUR = 4 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.50E-06$ $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Heptachlorodibenzofuran, 1,2,3,4,7,8,9- CAS # 55673-89-7

Cancer Value

IUR = 4 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.50E-06 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorobenzene CAS # 118-74-1

Cancer Value

IUR = 4.60E-04 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0374_summary.pdf.

Retrieved on December 30, 2024.

Hexachlorobutadiene CAS# 87-68-3

Cancer Value

IUR = 2.20E-05 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.45 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0058_summary.pdf.

Retrieved on December 30, 2024.

Hexachlorocyclohexane 1,2,3,4,5,6- (all isomers) CAS # 608-73-1

Cancer Value

IUR = 5.10E-04 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0165_summary.pdf.

Retrieved on December 30, 2024.

Hexachlorocyclohexane, alpha- CAS # 319-84-6

Cancer Value

IUR = 1.80E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 5.60E-03 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0162_summary.pdf.

Retrieved on December 30, 2024.

Hexachlorocyclohexane, beta-1,2,3,4,5,6- CAS # 319-85-7

Cancer Value

IUR = 5.30E-04 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0244_summary.pdf.

Retrieved on December 30, 2024.

Hexachlorocyclohexane- Gamma Isomer CAS # 58-89-9

Cancer Value

IUR = 3.10E-04 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/hexachlorocyclohexane-gamma-isomer>. Retrieved on December 30, 2024.

Lindane Compounds

Cancer Value

IUR = 3.10E-04 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/hexachlorocyclohexane-gamma-isomer>. Retrieved on December 30, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Hexachlorocyclopentadiene CAS # 77-47-4 CAS # 77-47-4

Chronic (RfC_{chronic})

0.20 µg/m³ https://iris.epa.gov/static/pdfs/0059_summary.pdf. Retrieved on January 2, 2025.

Hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8- CAS # 39227-28-6

Cancer Value

IUR = 40 (µg/m³)⁻¹ or cancer value = 2.50E-07 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8- CAS # 57653-85-7

Cancer Value

IUR = 1.3 (µg/m³)⁻¹ or cancer value = 7.69E-06 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9- CAS # 19408-74-3

Cancer Value

IUR = 1.3 (µg/m³)⁻¹ or cancer value = 7.69E-06 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorodibenzofuran, 1,2,3,4,7,8- CAS # 70648-26-9

Cancer Value

IUR = 40 (µg/m³)⁻¹ or cancer value = 2.50E-07 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorodibenzofuran, 1,2,3,6,7,8- CAS # 57117-44-9

Cancer Value

IUR = 40 (µg/m³)⁻¹ or cancer value = 2.50E-07 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachlorodibenzofuran, 1,2,3,7,8,9- CAS # 72918-21-9

Cancer Value

IUR = 40 (µg/m³)⁻¹ or cancer value = 2.50E-07 µg/m³

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Hexachlorodibenzofuran, 2,3,4,6,7,8- CAS # 60851-34-5

Cancer Value

IUR = 40 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.50E-07 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Hexachloroethane CAS # 67-72-1

Acute (RfC_{acute})

58,000 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp97.pdf>. Retrieved on December 20, 2024.

Cancer Value

IUR = 1.1E-05 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.91 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/hexachloroethane>.

Retrieved on December 30, 2024.

Hexamethylene-1,6-diisocyanate CAS # 822-06-0

Acute (RfC_{acute})

0.3 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/hexamethylene-diisocyanate-monomer>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.01 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0638_summary.pdf. Retrieved on January 2, 2025.

Hexane CAS # 110-54-3

Acute (RfC_{acute})

21,000 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp113.pdf>. Retrieved on October 24, 2025.

Chronic (RfC_{chronic})

700 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>.

Retrieved on January 2, 2025.

Hexanone-2 CAS # 591-78-6

Chronic (RfC_{chronic})

30 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>.

Retrieved on January 2, 2025.

Hydrazine CAS # 302-01-2

Cancer Value

IUR = 4.90E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.04E-03 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0352_summary.pdf.

Retrieved on December 30, 2024.

Hydrochloric acid (hydrogen chloride) CAS # 7647-01-0

Acute (RfC_{acute})

2,100 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/hydrogen-chloride>. Retrieved on December 16, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

20 µg/m³ https://iris.epa.gov/static/pdfs/0396_summary.pdf. Retrieved on January 2, 2025.

Hydrogen cyanide CAS # 74-90-8

Acute (RfC_{acute})

340 µg/m³ <https://oehha.ca.gov/chemicals/hydrogen-cyanide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.8 µg/m³ https://iris.epa.gov/static/pdfs/0060_summary.pdf. Retrieved on December 31, 2024.

Hydrogen fluoride (Hydrofluoric acid) CAS # 7664-39-3

Acute (RfC_{acute})

16 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp11.pdf>. Retrieved on January 8, 2026.

Chronic (RfC_{chronic})

14 µg/m³ <https://oehha.ca.gov/chemicals/hydrogen-fluoride>. Retrieved on December 16, 2024.

Hydrogen selenide CAS # 7783-07-5

Acute (RfC_{acute})

5 µg/m³ <https://oehha.ca.gov/chemicals/hydrogen-selenide>. Retrieved on December 16, 2024.

Hydrogen sulfide CAS # 7783-06-4

Acute (RfC_{acute})

98 µg/m³ <https://www.atsdr.cdc.gov/toxprofiles/tp114.pdf>. Retrieved on January 8, 2026.

Chronic (RfC_{chronic})

2 µg/m³ https://iris.epa.gov/static/pdfs/0061_summary.pdf. Retrieved on January 2, 2025.

Indeno(1,2,3-cd)pyrene CAS # 193-39-5

Cancer Value

IUR = 1.10E-04 (µg/m³)⁻¹ or cancer value = 9.09E-02 µg/m³ <https://oehha.ca.gov/chemicals/indeno1-2-3-c-dpyrene>. Retrieved on February 23, 2025.

Isophorone CAS # 78-59-1

Chronic (RfC_{chronic})

2,000 µg/m³ <https://oehha.ca.gov/chemicals/isophorone>. Retrieved on January 2, 2025.

Lead CAS # 7439-92-1

Cancer Value

IUR = 1.20E-05 (µg/m³)⁻¹ or cancer value = 0.83 µg/m³ <https://oehha.ca.gov/chemicals/lead-and-lead-compounds>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Lead Acetate CAS # 301-04-2

Cancer Value

IUR = $8.00\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.13 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/lead-acetate>. Retrieved on December 31, 2024.

Lead Chromate CAS # 7758-97-6

Cancer Value

IUR = $1.11\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Lead Compounds CAS # LEAD-COMPS

Cancer Value

IUR = $1.20\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.83 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/lead-and-lead-compounds>. Retrieved on December 31, 2024.

Lead Phosphate CAS # 7446-27-7

Cancer Value

IUR = $1.20\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.83 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/lead-and-lead-compounds>. Retrieved on December 31, 2024.

Lead Subacetate CAS # 1335-32-6

Cancer Value

IUR = $1.10\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.91 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/lead-subacetate>. Retrieved on December 31, 2024.

Maleic anhydride CAS # 108-31-6

Chronic (RfC_{chronic})

0.70 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/maleic-anhydride>. Retrieved on January 2, 2025.

Manganese CAS # 7439-96-5

Chronic (RfC_{chronic})

0.10 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/manganesesumm.pdf>. Retrieved on October 15, 2025.

Manganese Compounds CAS # MANGANESE-COMPS

Chronic (RfC_{chronic})

0.10 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/manganesesumm.pdf>. Retrieved on October 15, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Mercury (elemental) CAS # 7439-97-6

Acute (RfC_{acute})

0.6 µg/m³ <https://oehha.ca.gov/chemicals/mercury-inorganic>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.30 µg/m³ https://iris.epa.gov/static/pdfs/0370_summary.pdf. Retrieved on January 2, 2025.

Mercury Compounds CAS # MERCURY-COMPS

Acute (RfC_{acute})

0.6 µg/m³ <https://oehha.ca.gov/chemicals/mercury-inorganic>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.30 µg/m³ https://iris.epa.gov/static/pdfs/0370_summary.pdf. Retrieved on January 2, 2025.

Methanol CAS # 67-56-1

Acute (RfC_{acute})

28,000 µg/m³ <https://oehha.ca.gov/chemicals/methanol>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

20,000 µg/m³ https://iris.epa.gov/static/pdfs/0305_summary.pdf. Retrieved on January 2, 2025.

Methoxyethanol, 2- (ethylene glycol monomethyl ether EGME) CAS # 109-86-4

Acute (RfC_{acute})

93 µg/m³ <https://oehha.ca.gov/chemicals/ethylene-glycol-monomethyl-ether>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

20 µg/m³ https://iris.epa.gov/static/pdfs/0525_summary.pdf. Retrieved on January 2, 2025.

Methyl Cellosolve Acetate CAS # 110-49-6

Chronic (RfC_{chronic})

1 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/MethoxyethanolAcetate2.pdf>. Retrieved on December 31, 2024.

Methyl chloride (Chloromethane) CAS # 74-87-3

Acute (RfC_{acute})

1,000 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp106.pdf>. Retrieved on December 20, 2024.

Chronic (RfC_{chronic})

90 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Methyl chloroform (1,1,1-Trichloroethane) CAS # 71-55-6

Acute (RfC_{acute})

9,000 µg/m³ https://iris.epa.gov/static/pdfs/0197_summary.pdf. Retrieved on December 30, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

5,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Methyl ethyl ketone (2-Butanone) CAS # 78-93-3

Acute (RfC_{acute})

2,950 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp29.pdf>. Retrieved on December 20, 2024.

Chronic (RfC_{chronic})

3,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 20, 2024.

Methyl isobutyl ketone (Hexone) CAS # 108-10-1

Chronic (RfC_{chronic})

3,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Methyl isocyanate CAS # 624-83-9

Chronic (RfC_{chronic})

1 µg/m³ <https://oehha.ca.gov/chemicals/methyl-isocyanate>. Retrieved on January 2, 2025.

Methyl methacrylate CAS # 80-62-6

Chronic (RfC_{chronic})

700 µg/m³ https://iris.epa.gov/static/pdfs/1000_summary.pdf. Retrieved on January 2, 2025.

Methyl tert butyl ether CAS # 1634-04-4

Acute (RfC_{acute})

7,200 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp91.pdf>. Retrieved on December 23, 2024.

Cancer Value

IUR = 2.60E-07 (µg/m³)⁻¹ or cancer value = 38 µg/m³ <https://oehha.ca.gov/chemicals/methyl-tertiary-butyl-ether>. Retrieved on December 30, 2024.

Methylcholanthrene, 3- CAS # 56-49-5

Cancer Value

IUR = 6.30E-03 (µg/m³)⁻¹ or cancer value = 1.59E-03 µg/m³ <https://oehha.ca.gov/chemicals/3-methylcholanthrene>. Retrieved on February 23, 2025.

Methylchrysene, 5- CAS # 3697-24-3

Cancer Value

IUR = 1.10E-03 (µg/m³)⁻¹ or cancer value = 9.09E-03 µg/m³ <https://oehha.ca.gov/chemicals/5-methylchrysene>. Retrieved on February 23, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Methylene bis(2-chloroaniline), 4,4- CAS # 101-14-4

Cancer Value

IUR = $4.30E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/44-methylene-bis2-chloroaniline>. Retrieved on December 31, 2024.

Methylene chloride (Dichloromethane) CAS # 75-09-2

Acute (RfC_{acute})

2,000 $\mu\text{g}/\text{m}^3$ <https://www.atsdr.cdc.gov/ToxProfiles/tp14.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

600 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Methylene diphenyl diisocyanate (MDI) CAS # 101-68-8

Acute (RfC_{acute})

12 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/methylene-diphenyl-diisocyanate-mdi>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.60 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0529_summary.pdf. Retrieved on January 2, 2025.

Methylenedianiline, 4,4- CAS # 101-77-9

Cancer Value

IUR = $4.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/44-methylenedianiline>. Retrieved on December 31, 2024.

Methylnaphthalene, 1- CAS # 90-12-0

Chronic (RfC_{chronic})

$3.00E-03$ $\mu\text{g}/\text{m}^3$ <https://cfpub.epa.gov/ncea/pprtv/documents/Methylnaphthalene1.pdf>. Retrieved on December 31, 2024.

Michler's ketone CAS # 90-94-8

Cancer Value

IUR = $2.50E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/michlers-ketone>. Retrieved on December 31, 2024.

Mirex CAS # 2385-85-5

Cancer Value

IUR = $5.10E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $1.96E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/mirex>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

N-Nitroso-N-methylurea CAS # 684-93-5

Cancer Value

IUR = $3.40\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.94\text{E-}04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/n-nitroso-n-methylurea>. Retrieved on December 31, 2024.

N-Nitrosodi-n-butylamine CAS # 924-16-3

Cancer Value

IUR = $1.60\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $6.20\text{E-}03$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0037_summary.pdf. Retrieved on December 30, 2024.

N-Nitrosodiethylamine CAS # 55-18-5

Cancer Value

IUR = $4.30\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.30\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0042_summary.pdf. Retrieved on December 30, 2024.

N-Nitrosodimethylamine CAS # 62-75-9

Cancer Value

IUR = $1.40\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $7.10\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0045_summary.pdf. Retrieved on December 30, 2024.

N-Nitrosodiphenylamine CAS # 86-30-6

Cancer Value

IUR = $2.60\text{E-}06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 3.8 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/n-nitrosodiphenylamine>. Retrieved on December 31, 2024.

N-Nitrosomorpholine CAS # 59-89-2

Cancer Value

IUR = $1.90\text{E-}03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $5.30\text{E-}03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/n-nitrosomorpholine>. Retrieved on December 31, 2024.

Naphthalene CAS # 91-20-3

Acute (RfC_{acute})

200 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/naphthalene.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

9 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/naphthalene.pdf>. Retrieved on December 30, 2024.

Nickel CAS # 7440-02-0

Acute (RfC_{acute})

0.20 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-and-nickel-compounds>. Retrieved on December 16, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Cancer Value

IUR = $2.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-and-nickel-compounds>. Retrieved on December 30, 2024.

Nickel Acetate CAS # 373-02-4

Acute (RfC_{acute})

0.20 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-acetate>. Retrieved on December 16, 2024.

Cancer Value

IUR = $2.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-acetate>. Retrieved on December 16, 2024.

Nickel Carbonate CAS # 3333-67-3

Acute (RfC_{acute})

0.20 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-carbonate>. Retrieved on December 16, 2024.

Cancer Value

IUR = $2.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-carbonate>. Retrieved on December 16, 2024.

Nickel Carbonyl CAS # 13463-39-3

Acute (RfC_{acute})

0.20 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-carbonyl>. Retrieved on December 16, 2024.

Cancer Value

IUR = $2.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-carbonyl>. Retrieved on December 16, 2024.

Nickel Compounds CAS # NICKEL-COMPS

Acute (RfC_{acute})

0.2 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-and-nickel-compounds>. Retrieved on December 30, 2024.

Cancer Value

IUR = $4.80E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.02 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0273_summary.pdf. Retrieved on December 30, 2024.

Nickel Hydroxide CAS # 12054-48-7

Acute (RfC_{acute})

0.20 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-hydroxide>. Retrieved on December 16, 2024.

Cancer Value

IUR = $2.60E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.04 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nickel-hydroxide>. Retrieved on December 16, 2024.

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Nickel oxide CAS # 1313-99-1

Acute (RfC_{acute})

0.20 µg/m³ <https://oehha.ca.gov/chemicals/nickel-oxide>. Retrieved on December 16, 2024.

Cancer Value

IUR = 2.60E-04 (µg/m³)⁻¹ or cancer value = 0.04 µg/m³ <https://oehha.ca.gov/chemicals/nickel-oxide>. Retrieved on December 16, 2024.

Nickel refinery dust

Acute (RfC_{acute})

0.20 µg/m³ <https://oehha.ca.gov/chemicals/nickel-refinery-dust>. Retrieved on December 16, 2024.

Cancer Value

IUR = 2.40E-04 (µg/m³)⁻¹ or cancer value = 0.04 µg/m³ https://iris.epa.gov/static/pdfs/0272_summary.pdf. Retrieved on December 30, 2024.

Nickel subsulfide (Ni3S2) CAS # 12035-72-2

Acute (RfC_{acute})

0.20 µg/m³ <https://oehha.ca.gov/chemicals/nickel-subsulfide>. Retrieved on December 16, 2024.

Cancer Value

IUR = 4.80E-04 (µg/m³)⁻¹ or cancer value = 0.02 µg/m³ https://iris.epa.gov/static/pdfs/0273_summary.pdf. Retrieved on December 30, 2024.

Nickelocene CAS # 1271-28-9

Acute (RfC_{acute})

0.20 µg/m³ <https://oehha.ca.gov/chemicals/nickelocene>. Retrieved on December 16, 2024.

Cancer Value

IUR = 2.60E-04 (µg/m³)⁻¹ or cancer value = 0.04 µg/m³ <https://oehha.ca.gov/chemicals/nickelocene>. Retrieved on December 16, 2024.

Nitric acid CAS # 7697-37-2

Acute (RfC_{acute})

86 µg/m³ <https://oehha.ca.gov/chemicals/nitric-acid>. Retrieved on December 16, 2024.

Nitroacenaphthene, 5- CAS # 602-87-9

Cancer Value

IUR = 3.70E-05 (µg/m³)⁻¹ or cancer value = 2.70E-01 µg/m³ <https://oehha.ca.gov/chemicals/5-nitroacenaphthene>. Retrieved on February 23, 2025.

Nitrobenzene CAS # 98-95-3

Acute (RfC_{acute})

500 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp140.pdf>. Retrieved on December 23, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Cancer Value

IUR = $4.00\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.25 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nitrobenzene>. Retrieved on October 15, 2025.

Nitrochrysene, 6- CAS # 7496-02-8

Cancer Value

IUR = $1.01\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}04$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/6-nitrochrysene>. Retrieved on February 23, 2025.

Nitrofen CAS # 1836-75-5

Cancer Value

IUR = $2.30\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.43 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/nitrofen-technical-grade>. Retrieved on December 31, 2024.

Nitrofluorene, 2- CAS # 607-57-8

Cancer Value

IUR = $1.01\text{E-}05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}01$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/2-nitrofluorene>. Retrieved on February 23, 2025.

Nitropropane, 2- CAS # 79-46-9

Chronic (RfC_{chronic})

20 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0519_summary.pdf. Retrieved on January 2, 2025.

Nitropyrene, 1- CAS # 5522-43-0

Cancer Value

IUR = $1.01\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/1-nitropyrene>. Retrieved on February 23, 2025.

Nitropyrene, 4- CAS # 57835-92-4

Cancer Value

IUR = $1.01\text{E-}04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.09\text{E-}02$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/4-nitropyrene>. Retrieved on February 23, 2025.

Nitrosodiphenylamine, p- CAS # 156-10-5

Cancer Value

IUR = $6.30\text{E-}06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 1.6 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/p-nitrosodiphenylamine>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Octachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8,9- CAS # 3268-87-9

Cancer Value

IUR = 0.12 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 8.33E-05 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Octachlorodibenzofuran, 1,2,3,4,6,7,8,9- CAS # 39001-02-0

Cancer Value

IUR = 0.12 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 8.33E-05 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

PCB 114 (2,3,4,4,5 Pentachlorobiphenyl) CAS # 74472-37-0

Cancer Value

IUR = 1.10E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00E-03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/23445-pecb>.

Retrieved on December 31, 2024.

PCB 118 (2,3,4,4,5 Pentachlorobiphenyl) CAS # 31508-00-6

Cancer Value

IUR = 1.10E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00E-03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/23445-pecb-0>.

Retrieved on December 31, 2024.

PCB 123 (2,3,4,4,5 Pentachlorobiphenyl) CAS # 65510-44-3

Cancer Value

IUR = 1.10E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00E-03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/23445-pecb-1>.

Retrieved on December 31, 2024.

PCB 126 (3,3,4,4,5 Pentachlorobiphenyl) CAS # 57465-28-8

Cancer Value

IUR = 3.8 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.60E-06 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/33445-pecb>. Retrieved on

December 31, 2024.

PCB 156 (2,3,3,4,4,5 Hexachlorobiphenyl) CAS # 38380-08-4

Cancer Value

IUR = 1.10E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00E-03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/233445-hxcb>.

Retrieved on December 31, 2024.

PCB 157 (2,3,3,4,4,5 Hexachlorobiphenyl) CAS # 69782-90-7

Cancer Value

IUR = 1.10E-03 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00E-03 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/233445-hxcb-0>.

Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

PCB 167 (2,3,4,4,5,5 Hexachlorobiphenyl) CAS # 52663-72-6

Cancer Value

IUR = 1.10×10^{-3} ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00×10^{-3} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/234455-hxcb>. Retrieved on December 31, 2024.

PCB 169 (3,3,4,4,5,5 Hexachlorobiphenyl) CAS # 32774-16-6

Cancer Value

IUR = 1.10 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.09×10^{-6} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/334455-hxcb>. Retrieved on December 31, 2024.

PCB 189 (2,3,3,4,4,5,5 Heptachlorobiphenyl) CAS # 39635-31-9

Cancer Value

IUR = 1.10×10^{-3} ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00×10^{-3} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/2334455-hpcb>. Retrieved on December 31, 2024.

PCB 77 (3,3,4,4-Tetrachlorobiphenyl) CAS # 32598-13-3

Cancer Value

IUR = 3.80×10^{-3} ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.60×10^{-3} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/3344-tcb>. Retrieved on December 31, 2024.

PCB 81 (3,4,4,5 Tetrachlorobiphenyl) CAS # 70362-50-4

Cancer Value

IUR = 1.10×10^{-2} ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00×10^{-4} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/3445-tcb>. Retrieved on December 31, 2024.

PCB 105 (2,3,3,4,4 Pentachlorobiphenyl) CAS # 32598-14-4

Cancer Value

IUR = 1.10×10^{-3} ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 9.00×10^{-3} $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/23344-pecb>. Retrieved on December 31, 2024.

Pentachlorodibenzo-p-dioxin, 1,2,3,7,8- CAS # 40321-76-4

Cancer Value

IUR = 400 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 2.50×10^{-8} $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Pentachlorodibenzofuran, 1,2,3,7,8- CAS # 57117-41-6

Cancer Value

IUR = 12 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 8.33×10^{-7} $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

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Pentachlorodibenzofuran, 2,3,4,7,8- CAS # 57117-31-4

Cancer Value

IUR = 120 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 8.33E-08 $\mu\text{g}/\text{m}^3$

<https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Pentachlorophenol CAS # 87-86-5

Cancer Value

IUR = 5.10E-06 ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 1.96 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/pentachlorophenol>.

Retrieved on December 31, 2024.

Perfluorobutane sulfonic acid (PFBS) CAS # 375-73-5

Chronic (RfC_{chronic})

0.30 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfbs.pdf>.

Retrieved on December 30, 2024.

Perfluorobutanoic acid (PFBA) CAS # 375-22-4

Chronic (RfC_{chronic})

10 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfba.pdf>.

Retrieved on December 30, 2024.

Perfluorohexanesulfonic acid (PFHxS) CAS # 355-46-4

Chronic (RfC_{chronic})

0.03 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfhxs.pdf>.

Retrieved on December 30, 2024.

Perfluorohexanoic acid (PFHxA) CAS # 307-24-4

Chronic (RfC_{chronic})

0.50 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfhxa.pdf>.

Retrieved on December 30, 2024.

Perfluorooctanoic acid (PFOA) CAS # 335-67-1

Chronic (RfC_{chronic})

9.10E-04 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfoa.pdf>.

Retrieved on October 15, 2025.

Perfluorooctane sulfonic acid (PFOS) CAS # 1763-23-1

Chronic (RfC_{chronic})

3.50E-03 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/pfos.pdf>.

Retrieved on October 15, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Perylene CAS # 198-55-0

Chronic (RfC_{chronic})

2.00E-03 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/Perylene.pdf>. Retrieved on December 31, 2024.

Phenol CAS # 108-95-2

Acute (RfC_{acute})

5,800 µg/m³ <https://oehha.ca.gov/chemicals/phenol>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

200 µg/m³ <https://oehha.ca.gov/chemicals/phenol>. Retrieved on January 2, 2025.

Phenylphenate, Sodium, o- CAS # 132-27-4

Cancer Value

IUR = 8.60E-07 (µg/m³)⁻¹ or cancer value = 11.6 µg/m³ <https://oehha.ca.gov/chemicals/o-phenylphenate-sodium>. Retrieved on December 31, 2024.

Phosgene CAS # 75-44-5

Acute (RfC_{acute})

4 µg/m³ <https://oehha.ca.gov/chemicals/phosgene>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.30 µg/m³ https://iris.epa.gov/static/pdfs/0487_summary.pdf. Retrieved on January 2, 2025.

Phosphine CAS # 7803-51-2

Chronic (RfC_{chronic})

0.30 µg/m³ https://iris.epa.gov/static/pdfs/0090_summary.pdf. Retrieved on January 2, 2025.

Phosphoric acid CAS # 7664-38-2

Chronic (RfC_{chronic})

10 µg/m³ https://iris.epa.gov/static/pdfs/0697_summary.pdf. Retrieved on January 2, 2025.

Phthalic anhydride CAS # 85-44-9

Chronic (RfC_{chronic})

20 µg/m³ <https://oehha.ca.gov/chemicals/phthalic-anhydride>. Retrieved on January 2, 2025.

Polybrominated Biphenyls CAS # 36355-01-8

Cancer Value

IUR = 8.60E-03 (µg/m³)⁻¹ or cancer value = 1.20E-03 µg/m³ <https://oehha.ca.gov/chemicals/polybrominated-biphenyls>. Retrieved on December 31, 2024.

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Polychlorinated biphenyls CAS # 1336-36-3

Cancer Value

IUR = $1.00E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.10 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0294_summary.pdf. Retrieved on December 30, 2024.

Polycyclic Organic Matter (POM) CAS # POM-COMPS

Cancer Value

IUR = $3.00E-05$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.33 $\mu\text{g}/\text{m}^3$ Assumes POM mixture is 5% as toxic as benzo(a)pyrene, based on guidance EPA's "Air Toxics Risk Assessment Reference Library Volume 2 - Facility-Specific Assessment" https://www.epa.gov/sites/default/files/2013-08/documents/volume_2_facilityassess.pdf. https://iris.epa.gov/static/pdfs/0136_summary.pdf. Retrieved on February 23, 2025.

Polymeric Methylene Diphenyl Diisocyanate CAS # 9016-87-9

Acute (RfC_{acute})

12 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/polymeric-methylene-diphenyl-diisocyanate>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.60 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0529_summary.pdf. Retrieved on January 2, 2025.

Ponceau MX (C.I. Food Red 5) CAS # 3761-53-3

Cancer Value

IUR = $1.30E-06$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 7.69 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/ponceau-mx>. Retrieved on December 31, 2024.

Potassium cyanide CAS # 151-50-8

Acute (RfC_{acute})

340 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/cyanide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.80 $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0060_summary.pdf. Retrieved on October 15, 2025.

Propane sultone, 1,3- CAS # 1120-71-4

Cancer Value

IUR = $6.90E-04$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = 0.01 $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/13-propane-sultone>. Retrieved on December 31, 2024.

Propiolactone, beta- CAS # 57-57-8

Cancer Value

IUR = $4.00E-03$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $2.50E-03$ $\mu\text{g}/\text{m}^3$ <https://oehha.ca.gov/chemicals/beta-propiolactone>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Propionaldehyde CAS # 123-38-6

Chronic (RfC_{chronic})

8 µg/m³ https://iris.epa.gov/static/pdfs/1011_summary.pdf. Retrieved on January 2, 2025.

Propylene CAS # 115-07-1

Chronic (RfC_{chronic})

3,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Propylene dichloride (1,2-Dichloropropane) CAS # 78-87-5

Acute (RfC_{acute})

92 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp134.pdf>. Retrieved on December 23, 2024.

Cancer Value

IUR = 3.70E-06 (µg/m³)⁻¹ or cancer value = 2.70 µg/m³

<https://cfpub.epa.gov/ncea/pprtv/documents/Dichloropropane12.pdf>. Retrieved on December 31, 2024.

Propylene Glycol Monomethyl Ether CAS # 107-98-2

Chronic (RfC_{chronic})

2,000 µg/m³ https://iris.epa.gov/static/pdfs/0404_summary.pdf. Retrieved on January 2, 2025.

Propylene oxide CAS # 75-56-9

Acute (RfC_{acute})

3,100 µg/m³ <https://oehha.ca.gov/chemicals/propylene-oxide>. Retrieved on December 16, 2024.

Cancer Value

IUR = 3.70E-06 (µg/m³)⁻¹ or cancer value = 2.70 µg/m³ https://iris.epa.gov/static/pdfs/0403_summary.pdf.

Retrieved on December 30, 2024.

Pyrrolidine, 1-Nitroso- CAS # 930-55-2

Cancer Value

IUR = 6.10E-04 (µg/m³)⁻¹ or cancer value = 1.64E-02 µg/m³ https://iris.epa.gov/static/pdfs/0081_summary.pdf.

Retrieved on October 15, 2025.

Selenium CAS # 7782-49-2

Chronic (RfC_{chronic})

20 µg/m³ <https://oehha.ca.gov/chemicals/selenium>. Retrieved on January 2, 2025.

Selenium Compounds CAS # SELENIUM-COMPS

Chronic (RfC_{chronic})

20 µg/m³ <https://oehha.ca.gov/chemicals/selenium>. Retrieved on January 2, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Selenium Sulfide CAS # 7446-34-6

Chronic (RfC_{chronic})

20 µg/m³ <https://oehha.ca.gov/chemicals/selenium>. Retrieved on January 2, 2025.

Silica CAS # 7631-86-9

Chronic (RfC_{chronic})

3 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/silicasumm.pdf>. Retrieved on January 2, 2025.

Sodium cyanide CAS # 143-33-9

Acute (RfC_{acute})

340 µg/m³ <https://oehha.ca.gov/chemicals/cyanide>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

0.8 µg/m³ https://iris.epa.gov/static/pdfs/0060_summary.pdf. Retrieved on January 2, 2025.

Sodium Dichromate CAS # 10588-01-9

Cancer Value

IUR = 1.11E-02 (µg/m³)⁻¹ or cancer value = 9.01E-04 µg/m³ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Strontium chromate CAS # 7789-06-2

Cancer Value

IUR = 1.11E-02 (µg/m³)⁻¹ or cancer value = 9.01E-04 µg/m³ https://iris.epa.gov/static/pdfs/0144_summary.pdf. Retrieved on December 30, 2024.

Styrene CAS # 100-42-5

Acute (RfC_{acute})

21,000 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp53.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

900 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on October 15, 2025.

Styrene oxide CAS # 96-09-3

Cancer Value

IUR = 4.60E-05 (µg/m³)⁻¹ or cancer value = 0.22 µg/m³ <https://oehha.ca.gov/chemicals/styrene-oxide>. Retrieved on October 15, 2025.

Sulfuric acid (aerosol forms only) CAS # 7664-93-9

Acute (RfC_{acute})

120 µg/m³ <https://oehha.ca.gov/chemicals/sulfuric-acid>. Retrieved on December 16, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

1 µg/m³ <https://oehha.ca.gov/chemicals/sulfuric-acid>. Retrieved on December 16, 2024.

Tert-Butyl Acetate CAS # 540-88-5

Cancer Value

IUR = 1.30E-06 (µg/m³)⁻¹ or cancer value = 7.7 µg/m³ <https://oehha.ca.gov/chemicals/tertiary-butyl-acetate>. Retrieved on December 31, 2024.

tert-Butyl Alcohol (tBA) CAS # 75-65-0

Chronic (RfC_{chronic})

5,000 µg/m³ https://iris.epa.gov/static/pdfs/1036_summary.pdf. Retrieved on January 2, 2025.

Tetrachlorodibenzo-p-dioxin, 2,3,7,8- CAS # 1746-01-6

Cancer Value

IUR = 400 (µg/m³)⁻¹ or cancer value = 2.50E-08 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Tetrachlorodibenzofuran, 2,3,7,8- CAS # 51207-31-9

Cancer Value

IUR = 40 (µg/m³)⁻¹ or cancer value = 2.50E-07 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/dioxinmemo1.pdf>. Retrieved on December 31, 2024.

Tetrachloroethane, 1,1,2,2- CAS # 79-34-5

Cancer Value

IUR = 5.80E-05 (µg/m³)⁻¹ or cancer value = 0.17 µg/m³ <https://oehha.ca.gov/chemicals/1122-tetrachloroethane>. Retrieved on December 31, 2024.

Tetrachloroethylene (Perchloroethylene) CAS # 127-18-4

Acute (RfC_{acute})

41 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp18.pdf>. Retrieved on December 23, 2024.

Cancer Value

IUR = 5.00E-06 (µg/m³)⁻¹ or cancer value = 2 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/tetrafactsheet.pdf>. Retrieved on January 2, 2025.

Tetrafloroethane, 1,1,2,2- CAS # 811-97-2

Chronic (RfC_{chronic})

80,000 µg/m³. https://iris.epa.gov/static/pdfs/0656_summary.pdf. Retrieved on January 27, 2026.

S-3. Inhalation Health Benchmarks (IHBs)

Tetrahydrofuran CAS # 109-99-9

Chronic (RfC_{chronic})

2,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Tetramethyldiaminodiphenylmethane CAS # 101-61-1

Cancer Value

IUR = 1.30E-05 (µg/m³)⁻¹ or cancer value = 0.77 µg/m³ <https://oehha.ca.gov/chemicals/tetramethyldiaminodiphenylmethane>. Retrieved on December 31, 2024.

Thiodianiline, 4,4'- CAS # 139-65-1

Cancer Value

IUR = 4.30E-03 (µg/m³)⁻¹ or cancer value = 2.33E-03 µg/m³ <https://oehha.ca.gov/chemicals/44-thiodianiline>. Retrieved on December 31, 2024.

Thiourea CAS # 62-56-6

Cancer Value

IUR = 2.10E-05 (µg/m³)⁻¹ or cancer value = 0.48 µg/m³ <https://oehha.ca.gov/chemicals/thiourea>. Retrieved on December 31, 2024.

Titanium Tetrachloride CAS # 7550-45-0

Chronic (RfC_{chronic})

0.1 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp101.pdf>. Retrieved on January 2, 2025.

Toluene CAS # 108-88-3

Acute (RfC_{acute})

7,600 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp56.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

4,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 23, 2024.

Toluene-2,4-diisocyanate CAS # 584-84-9

Acute (RfC_{acute})

2 µg/m³ <https://oehha.ca.gov/chemicals/toluene-diisocyanates-24-and-2-6>. Retrieved on December 31, 2024.

Cancer Value

IUR = 1.10E-05 (µg/m³)⁻¹ or cancer value = 0.91 µg/m³ <https://oehha.ca.gov/chemicals/toluene-diisocyanates-24-and-2-6>. Retrieved on December 31, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Toluenediisocyanate (mixed isomers) CAS # 26471-62-5

Acute (RfC_{acute})

0.07 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp206.pdf>. Retrieved on December 16, 2024.

Cancer Value

IUR = 1.10E-05 (µg/m³)⁻¹ or cancer value = 0.91 µg/m³ <https://oehha.ca.gov/chemicals/toluene-diisocyanates>. Retrieved on December 30, 2024.

Toluene diamine, 2,4- CAS # 95-80-7

Cancer Value

IUR = 1.10E-03 (µg/m³)⁻¹ or cancer value = 9.1E-03 µg/m³ <https://oehha.ca.gov/chemicals/24-diaminotoluene>. Retrieved on December 31, 2024.

Toluidine, o- (Methylaniline, 2-) CAS # 95-53-4

Cancer Value

IUR = 5.10E-05 (µg/m³)⁻¹ or cancer value = 0.2 µg/m³ <https://oehha.ca.gov/chemicals/o-toluidine>. Retrieved on December 31, 2024.

Toxaphene CAS # 8001-35-2

Cancer Value

IUR = 3.20E-04 (µg/m³)⁻¹ or cancer value = 0.03 µg/m³ https://iris.epa.gov/static/pdfs/0346_summary.pdf. Retrieved on December 30, 2024.

trans-1,3-Dichloropropene CAS # 10061-02-6

Cancer Value

IUR = 4.00E-06 (µg/m³)⁻¹ or cancer value = 2.5 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on October 15, 2025.

Trichlorobenzene, 1,2,4- CAS # 120-82-1

Chronic (RfC_{chronic})

2 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Trichloroethane, 1,1,2- CAS # 79-00-5

Acute (RfC_{acute})

160 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp148.pdf>. Retrieved on October 15, 2025.

Cancer Value

IUR = 1.60E-05 (µg/m³)⁻¹ or cancer value = 0.63 µg/m³ https://iris.epa.gov/static/pdfs/0198_summary.pdf. Retrieved on October 15, 2025.

S-3. Inhalation Health Benchmarks (IHBs)

Trichloroethylene (TCE) CAS # 79-01-6

Acute (RfC_{acute})

2 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/tceairsumm.pdf>. Retrieved on December 30, 2024.

Cancer Value

IUR = 5.00E-06 (µg/m³)⁻¹ or cancer value = 2 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/tceairsumm.pdf>. Retrieved on December 30, 2024.

Trichlorofluoromethane (CFC-11) CAS # 75-69-4

Chronic (RfC_{chronic})

1,000 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on December 31, 2024.

Trichlorophenol, 2,4,6- CAS # 88-06-2

Cancer Value

IUR = 3.10E-06 (µg/m³)⁻¹ or cancer value = 3.2 µg/m³ https://iris.epa.gov/static/pdfs/0122_summary.pdf. Retrieved on October 15, 2025.

Trichloropropane, 1,2,3- CAS # 96-18-4

Acute (RfC_{acute})

6 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp57.pdf>. Retrieved on October 15, 2025.

Chronic (RfC_{chronic})

0.30 µg/m³ https://iris.epa.gov/static/pdfs/0200_summary.pdf. Retrieved on December 31, 2024.

Triethylamine CAS # 121-44-8

Acute (RfC_{acute})

2,800 µg/m³ <https://oehha.ca.gov/chemicals/triethylamine>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

7 µg/m³ https://iris.epa.gov/static/pdfs/0520_summary.pdf. Retrieved on January 2, 2025.

Trifluoroethane, 1,1,1- CAS # 420-46-2

Chronic (RfC_{chronic})

20,000 µg/m³ <https://cfpub.epa.gov/ncea/pprtv/documents/Trifluoroethane111.pdf>. Retrieved on December 3, 2025.

Trimethylbenzene, 1,2,3- CAS # 526-73-8

Acute (RfC_{acute})

2,400 µg/m³ <https://oehha.ca.gov/sites/default/files/media/downloads/cnrn/tmbrelfinal100602023.pdf>. Retrieved on January 22, 2026.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

60 µg/m³ https://iris.epa.gov/static/pdfs/1037_summary.pdf. Retrieved on January 2, 2025.

Trimethylbenzene, 1,2,4- CAS # 95-63-6

Acute (RfC_{acute})

2,400 µg/m³ <https://oehha.ca.gov/chemicals/124-trimethylbenzene>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

60 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Trimethylbenzene, 1,3,5- CAS # 108-67-8

Acute (RfC_{acute})

2,400 µg/m³ <https://oehha.ca.gov/chemicals/135-trimethylbenzene>. Retrieved on December 16, 2024.

Chronic (RfC_{chronic})

60 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Vanadium CAS # 7440-62-2

Acute (RfC_{acute})

0.8 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp58.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

0.10 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp58.pdf>. Retrieved on December 30, 2024.

Vanadium Compounds CAS # VANADIUM-COMPS

Acute (RfC_{acute})

0.8 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp58.pdf>. Retrieved on December 30, 2024.

Chronic (RfC_{chronic})

0.10 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp58.pdf>. Retrieved on December 30, 2024.

Vanadium Pentoxide, (V₂O₅) CAS # 1314-62-1

Acute (RfC_{acute})

30 µg/m³ <https://oehha.ca.gov/chemicals/vanadium-pentoxide>. Retrieved on December 16, 2024.

Cancer Value

IUR = 8.30E-03 (µg/m³)⁻¹ or cancer value = 1.2E-03 µg/m³

<https://cfpub.epa.gov/ncea/pprtv/documents/VanadiumPentoxide.pdf>. Retrieved on December 30, 2024.

Vinyl acetate CAS # 108-05-4

Acute (RfC_{acute})

3,500 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp59.pdf>. Retrieved on December 30, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

200 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Vinyl bromide CAS # 593-60-2

Cancer Value

IUR = 1.50E-05 (µg/m³)⁻¹ or cancer value = 0.67 µg/m³
<https://cfpub.epa.gov/ncea/pprtv/documents/VinylBromide.pdf>. Retrieved on December 31, 2024.

Vinyl chloride CAS # 75-01-4

Acute (RfC_{acute})

1,300 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp20.pdf>. Retrieved on December 30, 2024.

Cancer Value

IUR = 8.80E-06 (µg/m³)⁻¹ or cancer value = 1.1 µg/m³ https://iris.epa.gov/static/pdfs/1001_summary.pdf. Retrieved on December 30, 2024.

Xylenes CAS # 1330-20-7

Acute (RfC_{acute})

8,700 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp71.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

100 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Xylenes, m- CAS # 108-38-3

Acute (RfC_{acute})

8,700 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp71.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

100 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Xylenes, o- CAS # 95-47-6

Acute (RfC_{acute})

8,700 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp71.pdf>. Retrieved on December 23, 2024.

Chronic (RfC_{chronic})

100 µg/m³ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>. Retrieved on January 2, 2025.

Xylenes, p- CAS # 106-42-3

Acute (RfC_{acute})

8,700 µg/m³ <https://www.atsdr.cdc.gov/ToxProfiles/tp71.pdf>. Retrieved on December 23, 2024.

S-3. Inhalation Health Benchmarks (IHBs)

Chronic (RfC_{chronic})

100 $\mu\text{g}/\text{m}^3$ <https://www.health.state.mn.us/communities/environment/risk/docs/guidance/air/inhalvalues.pdf>.

Retrieved on January 2, 2025.

Zinc chromate CAS # 13530-65-9

Cancer Value

IUR = $1.11\text{E-}02$ ($\mu\text{g}/\text{m}^3$)⁻¹ or cancer value = $9.01\text{E-}04$ $\mu\text{g}/\text{m}^3$ https://iris.epa.gov/static/pdfs/0144_summary.pdf.

Retrieved on December 30, 2024.