

Users are advised to consult the Canadian Environmental Quality Guidelines introductory text, factsheet, and/or protocols for specific information and implementation guidance pertaining to each environmental quality guideline.

Dissolved oxygen

Synonyms and/or acronyms: DO

CASRN: N/A

Parameter 1: INORGANIC

Water Quality for the Protection of Aquatic Life

Further documentation on these guidelines can be found in the Canadian Environment Quality Guidelines.

[Download
Factsheet](#)

Freshwater

Concentration ($\mu\text{g/L}$)

Variable

Lowest acceptable dissolved oxygen concentration:

for warm water biota: early life stages = 6000 $\mu\text{g/L}$

for warm water biota: other life stages = 5500 $\mu\text{g/L}$

for cold water biota: early life stages = 9500 $\mu\text{g/L}$

for cold water biota: other life stages = 6500 $\mu\text{g/L}$

Note:

Substance has been re-evaluated since CCREM 1987 + Appendixes. Either a new guideline has been derived or insufficient data existed to derive a new guideline.

Date

1999

Marine

Concentration ($\mu\text{g/L}$)

>8000 & Narrative

The recommended minimum concentration of DO in marine and estuarine waters is 8.0 mg/L.

Depression of DO below the recommended value should only occur as a result of natural processes. When the natural DO level is less than the recommended interim guideline, the natural concentration should become the interim guideline at that site. When ambient DO concentrations are >8.0 mg/L, human activities should not cause DO levels to decrease by more than 10% of the natural concentration expected in the receiving environment at that time.

Note:

Interim guideline.

Substance has been re-evaluated since CCREM 1987 + Appendixes. Either a new guideline has been derived or insufficient data existed to derive a new guideline.

| | |
|--|---------|
| Date | 1996 |
| Water Quality for the Protection of Agriculture | |
| Irrigation | |
| Concentration (µg/L) | No data |
| Date | No data |
| Livestock | |
| Concentration (µg/L) | No data |
| Date | No data |
| Sediment Quality for the Protection of Aquatic Life | |
| Freshwater | |
| Concentration (µg/kg dry weight) - ISQG | No data |
| Concentration (µg/kg dry weight) - PEL | No data |
| Date | No data |
| Marine | |
| Concentration (µg/kg dry weight) - ISQG | No data |
| Concentration (µg/kg dry weight) - PEL | No data |
| Date | No data |
| Soil Quality for the Protection of Environmental and Human Health | |
| Concentration (mg/kg dry weight) - Agricultural | No data |
| Concentration (mg/kg dry weight) - Residential / parkland | No data |
| Concentration (mg/kg dry weight) - Commercial | No data |
| Concentration (mg/kg dry weight) - Industrial | No data |
| Date | No data |
| Tissue Residue Quality for the Protection of Wildlife Consumer of Aquatic Biota | |
| Concentration (µg/kg diet wet weight) | No data |
| Date | No data |