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.

Nitrate

CASRN: 14797-55-8
Parameter 1: INORGANIC

Parameter 2: Inorganic nitrogen compounds

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

Short Term Concentration (µg/L)

550,000 µg/L or 550 mg/L

All nitrate concentrations presented here will be for the ion only (i.e., asmg NO₃-L⁻¹). Conversion factors for some of the commonly reported units in the literature are provided in the factsheet.

For protection from direct toxic effects; the guidelines do not consider indirect effects due to eutrophication.

Derived from toxicity tests utilizing NaNO₃

Derived with severe-effects data (such as lethality) and are not intended to protect all components of aquatic ecosystem structure and function but rather to protect most species against lethality during severe but transient events (e.g. inappropriate application or disposal of the substance of concern).

Long Term Concentration (µg/L)

13,000 µg/L or 13 mg/L

All nitrate concentrations presented here will be for the ion only (i.e., asmg NO₃-L-1). Conversion factors for some of the commonly reported units in the literature are provided in the factsheet.

For protection from direct toxic effects; the guidelines do not consider indirect effects due to eutrophication.

Derived from toxicity tests utilizing NaNO₃.

Derived with mostly no- and some low-effect data and are intended to protect against negative effects to aquatic ecosystem structure and function during indefinite exposures (e.g. abide by the guiding principle as per CCME 2007).

Date 2012

Marine

Short Term Concentration (µg/L)

1,500,000 µg/L or 1500 mg/L

All nitrate concentrations presented here will be for the ion only (i.e., asmg NO₃-L⁻¹). Conversion factors for some of the commonly reported units in the literature are provided in the factsheet.

For protection from direct toxic effects; the guidelines do not consider indirect effects due to eutrophication.

Derived from toxicity tests utilizing NaNO₃ and KNO₃.

Derived with severe-effects data (such as lethality) and are not intended to protect all components of aquatic ecosystem structure and function but rather to protect most species against lethality during severe but transient events (e.g. inappropriate application or disposal of the substance of concern).

Long Term Concentration (µg/L)

200,000 μg/L or 200 mg/L

All nitrate concentrations presented here will be for the ion only (i.e., asmg NO₃-L⁻¹). Conversion factors for some of the commonly reported units in the literature are provided in the factsheet.

For protection from direct toxic effects; the guidelines do not consider indirect effects due to eutrophication.

Derived from toxicity tests utilizing NaNO₃ and KNO₃.

Derived with mostly no- and some low-effect data and are intended to protect against negative effects to aquatic ecosystem structure and function during indefinite exposures (e.g. abide by the guiding principle as per CCME 2007).

Date 2012

rrigation	
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 Widlife Consumer of A	Aquatic Biota
Concentration (µg/kg diet wet weight)	No data
Date	No data