^{134}Cs

STAR
STRATEGY FOR ALLIED RADIOECOLOGY

Commonly used or illustrative parameters

Generic parameters	Value
Radioactive half life [1]	2.06 Years
Origin [1]	Activation [fission]
Principal decay mode [1]	Beta [gamma]
Specific activity [2]	4.81×10^{13} Bq g^{-1}
Freshwater Kd [3]	2.9×10^{4} L kg^{-1}
Marine Kd [4]	2.0×10^{3} L kg^{-1}

Parameters useful for human assessments	Value
CR Pasture grass [3]	6.3×10^{-2} L kg^{-1}
CR Freshwater fish [3]	3.0×10^{3} L kg^{-1}
CR Marine fish [4]	1.0×10^{2} L kg^{-1}
F_f Cow meat [3]	2.2×10^{-2} d kg^{-1}
F_m Cow milk [3]	4.6×10^{-3} d L^{-1}
Human fractional absorption (f1) [5]	1
Inhalation dose coefficient [6]	2.0×10^{-8} Sv Bq^{-1}
Ingestion dose coefficient [6]	1.9×10^{-8} Sv Bq^{-1}
Biological half life for Human (adult) [7]	a: 2 (0.1) days , b: 110 (0.9) days
Biological half life for Cow milk [8]	a: 0.9 days, b: 8.7 days
EU Food intervention limit- Dairy [9]	1000 Bq L^{-1} or Bq kg^{-1}
EU Food intervention limit- Baby food [9]	400 Bq L^{-1} or Bq kg^{-1}
EU Food intervention limit- Liquid [9]	1000 Bq L^{-1}
EU Food intervention limit- Other food [9]	1250 Bq L^{-1} or Bq kg^{-1}
EU Food intervention limit- Minor food [9]	12500 Bq L^{-1} or Bq kg^{-1}

^{134}Cs Nuclear data

www.radioecology-exchange.org

^{134}Cs

Commonly used or illustrative parameters

Parameters useful for wildlife assessments	Value
Terrestrial EMCL— Soil [10]	1.67×10^3 Bq kg^{-1}
Freshwater EMCL—Water [10]	2.06×10^{-2} Bq L^{-1}
Freshwater EMCL— Sediment [10]	5.99×10^3 Bq kg^{-1}
Marine EMCL — Water [10]	9.52×10^1 Bq L^{-1}
Marine EMCL — Sediment [10]	8.26×10^3 Bq kg^{-1}
CR Freshwater fish [10]	3.4×10^3 L kg^{-1}
CR Freshwater mollusc [10]	1.3×10^2 L kg^{-1}
CR Marine fish [10]	8.4×10^1 L kg^{-1}
CR Marine mollusc [10]	5.0×10^1 L kg^{-1}
Internal DCC Terrestrial mammal (rat) on soil [10]	1.7×10^{-4} µGy h^{-1}/Bq kg^{-1} whole organism
External DCC Terrestrial mammal (rat) in soil [10]	7.8×10^{-4} µGy h^{-1}/Bq kg^{-1} soil
External DCC Terrestrial mammal (rat) on soil [10]	3.1×10^{-4} µGy h^{-1}/Bq kg^{-1} soil
Internal DCC Marine fish (benthic) [10]	1.7×10^{-4} µGy h^{-1}/Bq kg^{-1} whole organism
External DCC Marine fish (benthic) in water [10]	8.2×10^{-4} µGy h^{-1}/Bq L^{-1} water
External DCC Marine fish (benthic) at sediment interface [10]	4.1×10^{-4} µGy h^{-1}/Bq kg^{-1} sediment
Internal DCC Freshwater fish (pelagic) [10]	2.1×10^{-4} µGy h^{-1}/Bq kg^{-1} whole organism
External DCC Freshwater fish in water [10]	7.9×10^{-4} µGy h^{-1}/Bq L^{-1} water

All terms used in these tables are described in underlying documents accessed via the hyperlinks provided

Sources of data: Reference list
Data compiled: December 2013
Data updated:

www.radioecology-exchange.org