

⁸⁵Sr



Commonly used or illustrative parameters

Generic parameters	Value
Radioactive half life [1]	6.49×10^1 Days
Origin [1]	Spallation by protons in natural molybdenum targets
Principal decay mode [1]	Electron capture
Specific activity [2]	8.88×10^{14} Bq g ⁻¹
Freshwater Kd [3]	1.2×10^3 L kg ⁻¹
Marine Kd [4]	2×10^2 L kg ⁻¹

Parameters useful for human assessments	Value
CR Pasture grass [4]	1.3×10^0
CR Freshwater fish [4]	1.4×10^{-2} L kg ⁻¹
CR Marine fish [3]	1.0×10^0 L kg ⁻¹
F _f Cow meat [4]	1.3×10^{-3} d kg ⁻¹
F _m Cow milk [4]	1.3×10^{-3} d kg ⁻¹
Human fractional absorption (f ₁) [5]	0.3
Inhalation dose coefficient [6]	8.1×10^{-10} Sv Bq ⁻¹
Ingestion dose coefficient [6]	5.6×10^{-10} Sv Bq ⁻¹
Biological half life for Human (adult) [7]	a: 11 yrs (1.0)
Biological half life for Cow milk [8]	0.5 days (0.93), 3 days (0.06), 16 days (0.004), 315 days (0.0006)
EU Food intervention limit- Dairy [9]	10 000 Bq L ⁻¹ or Bq kg ⁻¹
EU Food intervention limit- Baby food [9]	4 000 Bq L ⁻¹ or Bq kg ⁻¹
EU Food intervention limit- Liquid [9]	10 000 Bq L ⁻¹ or Bq kg ⁻¹
EU Food intervention limit- Other food [9]	12 500 Bq L ⁻¹ or Bq kg ⁻¹
EU Food intervention limit- Minor food [9]	125 000 Bq L ⁻¹ or Bq kg ⁻¹

⁸⁵Sr Nuclear data

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Commonly used or illustrative parameters

Parameters useful for wildlife assessments	Value
Terrestrial EMCL— Soil	n/a
Freshwater EMCL—Water	n/a
Freshwater EMCL— Sediment	n/a
Marine EMCL — Water	n/a
Marine EMCL — Sediment	n/a
CR Terrestrial mammal (rat) [10]	1.7×10^0
CR Freshwater fish [10]	8.6×10^2
CR Freshwater mollusc [10]	4.6×10^2
CR Marine fish [10]	2.5×10^1
CR Marine mollusc [10]	1.5×10^2
Internal DCC Terrestrial mammal (rat) on soil [10]	$3.49 \times 10^{-5} \mu\text{Gy h}^{-1}/\text{Bq kg}^{-1}$ whole organism
External DCC Terrestrial mammal (rat) in soil [10]	$2.5 \times 10^{-4} \mu\text{Gy h}^{-1}/\text{Bq kg}^{-1}$ soil
External DCC Terrestrial mammal (rat) on soil [10]	$1.7 \times 10^{-8} \mu\text{Gy h}^{-1}/\text{Bq kg}^{-1}$ soil
Internal DCC Marine fish (benthic) [10]	$3.45 \times 10^{-5} \mu\text{Gy h}^{-1}/\text{Bq kg}^{-1}$ whole organism
External DCC Marine fish (benthic) in water [10]	$2.65 \times 10^{-4} \mu\text{Gy h}^{-1}/\text{Bq L}^{-1}$ water
Internal DCC Freshwater fish (pelagic) [10]	$4.9 \times 10^{-5} \mu\text{Gy h}^{-1}/\text{Bq kg}^{-1}$ whole organism
External DCC Freshwater fish in water [10]	$2.5 \times 10^{-4} \mu\text{Gy h}^{-1}/\text{Bq L}^{-1}$ water

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

Sources of data [reference list](#)
 Data compiled: September 2012
 Data updated : May 2015

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