STAR
STRATEGY FOR ALLIED RADIOECOLOGY

Radioisotopes of significance to environmental radioactivity

^{110m}Ag

Silver

radioecology

Silver (Ag)

Element classification: Transition metal

No. of isotopes: 28 (2 stable, both natural)

Typical elemental concentrations:

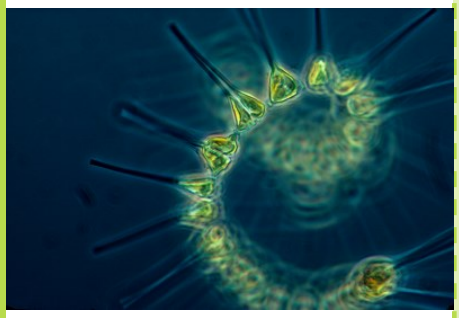
Soil (dry): up to 44 µg/kg
Sea water: 2-100 µg/l

Behaviour in the Environment

- Metallic form and many compounds are insoluble
- Accumulates in liver and brain tissue in animals
- High transfer to fungi
- Salts are generally poorly soluble

Key sources of radioisotopes

- Nuclear cycle: Nuclear power plants, reprocessing, waste
- Fallout: Nuclear weapons testing
- Nuclear accidents: e.g. Chernobyl, Fukushima
- Natural sources: None



Why is it of interest?

- High bioaccumulation into aquatic organisms
- High transfer to some tissues/ organisms in the terrestrial environment

For more information ...

IRSN ^{110m}Ag factsheet