

This Test Guideline outlines a process for evaluating a substance's capacity for bioconcentration in fish in flow-through circumstances (but semi-static regimes are acceptable).

The exposure (uptake) and post-exposure (depuration) phases are the two stages of the test. Separate groups of four fish of the same species are exposed to at least two concentrations of the test drug during the absorption phase, which lasts 28 days on average and 60 days on maximum. For the depuration phase, they are then moved to a medium devoid of the test material. Unless the substance's uptake during the uptake phase was negligible, a depuration phase is always required. A control group of fish is kept apart from the test chemical in addition to the two test concentrations.

During both test phases, the concentration of the test chemical in or on the fish is monitored. Temperature, total hardness and salinity, pH, dissolved oxygen, and TOC should all be recorded in vessels throughout the test. When possible, the biological material used to measure the concentration of the test chemical should also be utilised to measure the lipid content. When feasible, the kinetic bioconcentration factor (BCFK) and the bioconcentration factor at apparent steady-state (BCF), which are represented as a function of the fish's total wet weight, are computed. In addition to whole body weight, the bioconcentration should be represented in respect to lipid content.