Supporting Information

Parameters for the single-species test

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Species | Tests | Exposure concentrations (mg·L-1) | Endpoints | Number per replicate | Replicates | Referrence |
| ALGAE | | | | | | |
| *Selenastrum capricornutum* | Algae Growth Inhibition Test | 0.00,1.00,5.00,10.0,20.0,40.0,80.0 | 72h-EC50,72h-EC10,72h-NOEC | an initial concentration ≥2x 104 cells·mL-1 | 3 | OECD，2011 |
| *Scendesmus quadricauda* | 0.00, 5.00,10.0,20.0,40.0,80.0,100 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| *Ankistrodesmus sp.* | 0.00,1.00,5.00,10.0,20.0,40.0,80.0 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| *Chlamydomonas reinhardi* | 0.00,1.00,5.00,10.0,20.0,40.0,80.0 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| *Chlorella vulgaris* | 0.00,1.00,5.00,10.0,20.0,40.0,80.0 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| *Nitzschia kutzigiana* | 0.00,1.00,5.00,10.0,20.0,40.0,80.0 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| *Anabaena cylindkica* | 0.00, 5.00,10.0,20.0,40.0,80.0,100 | 72h-EC50,72h-EC10,72h-NOEC | 3 |
| ROTIFERA | | | | | | |
| *Philodina sp.* | acute toxicity test | 0.00,1.00,5.00,8.90,15.8,28.1,50.0 | 24h-EC50, 24h-EC10, | 10 | 4 | ASTM,2001 |
| Reproduction toxicity test | 0.00, 0.01,0.03,0.10,0.32,1.00,3.00 | 48h-NOEC | 10 | 8 | ISO,2008 |
| CRUSTACEA | | | | | | |
| *Daphnia magna* | acute toxicity test | 0.00,1.00,2.00,4.00,8.00,16.0 | 48h-EC50,48h-EC10 | 5 | 4 | OECD，2001 |
| Reproduction toxicity test | 0.00, 0.20, 0.30, 0.45, 0.68, 1.01 | 21d-NOEC | 1 | 10 | OECD，2008 |
| *Neocaridina sp.* | acute toxicity test | 0.00,1.00,2.00,4.00,8.00,16.0 | 96h-EC50 | 5 | 4 | EPA，1996 |
| VERTEBRATE | | | | | | |
| *Gobiocypris rarus* | [Short-term Toxicity Test on Embryo and Sac-Fry Stages](http://www.oecd-ilibrary.org/environment/test-no-212-fish-short-term-toxicity-test-on-embryo-and-sac-fry-stages_9789264070141-en) | 0.00,1.00,2.00,5.00,8.00,10.0,20.0 | 10d-EC50,10d-EC10 | 10 | 3 | OECD，1998 |
| [Early-life Stage Toxicity Test](http://www.oecd-ilibrary.org/environment/test-no-210-fish-early-life-stage-toxicity-test_9789264203785-en) | 0.00,0.05,0.10,0.20,0.50,1.00 | 28d-NOEC | 30 | 2 | OECD，2013 |

**Reference:**

OECD. OECD Guidelines for Testing of Chemicals, 212 Fish, Short-term Toxicity Test on Embryo and Sac-Fry Stages [S]. Paris: OECD, 1998.

OECD. OECD Guidelines for Testing of Chemicals, 202 Daphnia sp. Acute Immobilization Test and Reproduction Test [S]. Paris: OECD, 2001.

OECD. OECD Guidelines for Testing of Chemicals, 201 Algae Growth Inhibition Test[S]. Paris: OECD, 2011.

OECD. OECD Guidelines for Testing of Chemicals, 211 Daphnia magna reproduction test [S]. Paris: OECD, 2012.

OECD. OECD Guidelines for Testing of Chemicals, 210 Fish, Early-life Stage Toxicity Test [S]. Paris: OECD, 2013.

EPA. Ecological Effects Test Guidelines OPPTS 850.1020, Gammarid Acute Toxicity Test[S]. 712–C–96–130 April 1996.

ISO. International Standard: Water quality-Determination of chronic toxicity to Brachionus calyciflorus in 48h[S].ISO 20666:2008.