

Ready Biodegradability Test - Closed Bottle

OECD 301D

Environment: Aerobic, Freshwater

Measurement Parameter: Dissolved Oxygen



Test Description

OECD 301D is a ready biodegradability test.

In order for a test item to be considered readily biodegradable, it must reach 60% in a 10-day window (The 10-day window starts once the test item reaches 10% degradation, and it must be before day 28). If it passes, it assumes the test item will undergo rapid and ultimate biodegradation in the environment.

Test Recommendations

Solubility	Must be water-soluble
Adsorption	Can be adsorbing
Volatility	Can be non-volatile
Inhibitory	No microorganism inhibition

Equivalent & Similar Tests

OECD 301F

Test Application

This test is common for samples that have a low ThOD/COD, or are expected to have inhibitory effects at 301F dosage levels.

To be exempt from the EU microplastics directive, the test item must reach 60% degradation in 60 days. (Does not need to occur in a 10-day window)

Test Specifications

Reference Material	Sodium benzoate
Duration	Typically 28 days, but up to 60 days
Temperature	22C +/- 2C
pH	7.4 +/- 0.2
Inoculum	Activated sludge from wastewater treatment plant
Required Info	ThOD or COD
Measurement Parameter	Dissolved oxygen