

# SOIL CONTROL LAB

42 HANGAR WAY  
WATSONVILLE  
CALIFORNIA  
95076  
USA

Work Order: 2050234-01  
Account #: 7482  
Date Reported: August 27, 2012

Amisha Patel  
Innovative Bottles LLC  
1280 Hoover Street  
Carlsbad CA, 92008

## Summary of Test Results

**Product Tested:** BioVials

**Purpose of this report:** This report only contains results for ISO 16929 (pilot scale disintegration) and Ecotoxicity by OECD Guideline 208. The client indicated they have undergone the testing needed for ASTM D6400 compliance other than the testing we have provided in this report.

**Summary of Results:** The product passed both the disintegration and ecotoxicity testing. Also, thickness along with FTIR and ash content were analyzed for the purpose of documenting the material being tested.

### Disintegration - Passed

- 100% of the sample passed the 2mm sieve after 12 weeks of composting

### Ecotoxicity - Passed

- Plant Growth Study - the 2 species that were used were cucumbers and corn. Both the germination rate and biomass of both species were 90% or greater when compared to the blank composts.

Sincerely,



Mike Galloway  
Lab Director

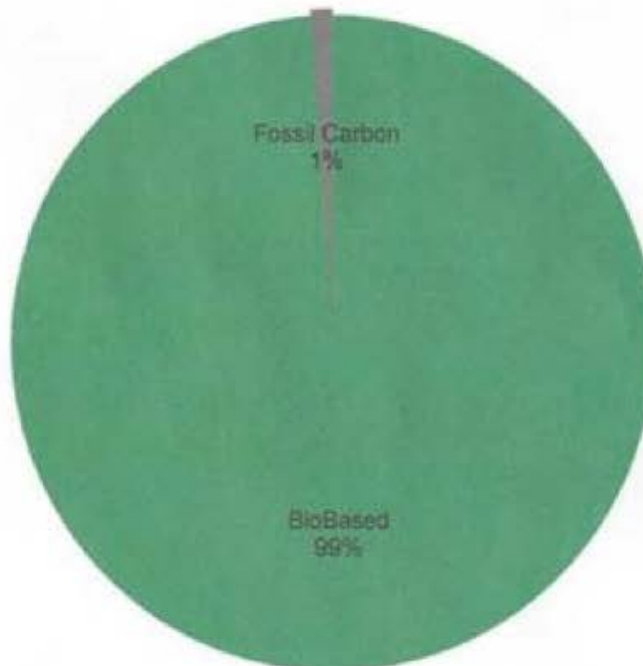


## Report of Biobased Content Analysis using ASTM-D6866-12

**Submitter:** Innovative Bottles, LLC  
**Submitter Label:** 13-16D PLA  
**Laboratory Number:** Beta-333842  
**Material:** Biobased Material  
**Date Received:** October 29, 2012  
**Date Reported:** November 13, 2012

**Mean Biobased Result : 99 % \***

**Proportions Biobased vs. Fossil Based indicated by  
14C content**



\* ASTM-D6866 cites precision on The Mean Biobased Result as +/- 3% (absolute). This is the most conservative estimate of error in the measurement of complex biobased containing solids and liquids based on empirical results. Real precision for readily combustible and homogenous materials (e.g. gasoline) and especially samples received as CO<sub>2</sub> (e.g. flue gas or CEMS exhaust) can be as low as +/- 0.5-2%. The result only applies to the analyzed material. Fluctuations in carbon content within a batch of product, gasoline or flue gas must be determined separately (e.g. averaged measurements of multiple solids or liquids, and single measurement of the combination of gas aliquots collected over time). The accuracy of the result as it applies to the analyzed product, fuel, or flue gas relies upon all the carbon in the analyzed material originating from either recently respired atmospheric carbon dioxide (within the last decade) or fossil carbon (more than 50,000 years old). "Percent biobased" specifically relates % renewable (or fossil) carbon to total carbon, not to total mass or molecular weight. Mean Biobased estimates greater than 100% are assigned a value of 100% for simplification.