ISO 19679:2020 (E)

Plastics — Determination of aerobic biodegradation of non-floating plastic materials in a seawater/sediment interface — Method by analysis of evolved carbon dioxide

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Test environment

6 Reagents

7 Apparatus

8 Procedure

- 8.1 Test material
- 8.2 Reference material
- 8.3 Preparation of the sediment
- 8.4 Test setup
- 8.5 Pre-conditioning phase
- 8.6 Start of the test
- 8.7 Carbon dioxide measurement
- 8.8 End of the test

9 Calculation and expression of results

- 9.1 Calculation
- 9.1.1 Amount of CO_2 produced
- 9.1.1.1 Net CO_2 produced
- 9.1.1.2 $Ba(OH)_2$ used as CO_2 absorber
- 9.1.1.3 KOH used as CO_2 absorber
- 9.1.2 Percentage of biodegradation
- 9.2 Visual inspection
- 9.3 Expression and interpretation of results

10 Validity of results

11 Test report

Annex A (informative) Example of respirometric system based on CO_2 measurement

Page count: 12