

DIN EN ISO 19679:2018-02 (E)

Plastics - Determination of aerobic biodegradation of non-floating plastic materials in a seawater/sediment interface - Method by analysis of evolved carbon dioxide (ISO 19679:2016)

Contents

| | Page |
|--|------|
| European foreword | 3 |
| Foreword | 4 |
| Introduction | 5 |
| 1 Scope | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions | 6 |
| 4 Principle | 7 |
| 5 Test environment | 7 |
| 6 Reagents | 7 |
| 7 Apparatus | 8 |
| 8 Procedure | 8 |
| 8.1 Test material | 8 |
| 8.2 Reference material | 9 |
| 8.3 Preparation of the sediment | 9 |
| 8.4 Test setup | 9 |
| 8.5 Pre-conditioning phase | 9 |
| 8.6 Start of the test | 10 |
| 8.7 Carbon dioxide measurement | 10 |
| 8.8 End of the test | 11 |
| 9 Calculation and expression of results | 11 |
| 9.1 Calculation | 11 |
| 9.1.1 Amount of CO ₂ produced | 11 |
| 9.1.2 Percentage of biodegradation | 13 |
| 9.2 Visual inspection | 13 |
| 9.3 Expression and interpretation of results | 13 |
| 10 Validity of results | 14 |
| 11 Test report | 14 |
| Annex A (informative) Example of respirometric system based on CO ₂ measurement | 15 |
| Bibliography | 16 |