

DIN EN ISO 23977-1:2022-01 (E)

Plastics - Determination of the aerobic biodegradation of plastic materials exposed to seawater - Part 1: Method by analysis of evolved carbon dioxide (ISO 23977-1:2020)

Contents		Page
European foreword		3
Foreword		4
Introduction		5
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Principle	9
5	Test environment	9
6	Reagents	9
7	Apparatus	10
8	Procedure	11
8.1	Test material	11
8.2	Reference materials	11
8.3	Test set up	12
8.4	Pre-conditioning phase	12
8.5	Start of the test	12
8.6	Carbon dioxide measurement	13
8.7	End of the test	13
9	Calculation and expression of results	14
9.1	Calculation	14
9.1.1	Amount of CO produced ²	14
9.1.2	Percentage of biodegradation	16
9.2	Visual inspection	17
9.3	Expression and interpretation of results	17
10	Validity of results	17
11	Test report	18
Annex A (informative) Example of a respirometric system		19
Bibliography		21