DIN EN ISO 20136:2020-12 (E)

Leather - Determination of degradability by micro- organisms (ISO 20136:2020)

Contents

Page

European foreword 3

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Termsanddefinitions 6

4 Symbols and abbreviated terms 7

5 Principle 7
5.1 General 7
5.2 Assessment of biodegradation by manual titration; method A 7
5.3 Assessment of biodegradation by infrared (IR) detection; method B 8

6 Chemicals 8

7 Apparatus and materials 9

8 Procedure 12
8.1 Collection and preparation of the inoculum 12
8.2 Preparation of the test material and reference material 12
8.3 Test conditions and incubation period 12
8.4 Termination of the test 12

9 Quantification 13
9.1 Assessment of biodegradation by manual titration (method A) 13
9.1.1 Determination of the organic carbon content 13
9.1.2 Determination of the amount of CO2 produced 13
9.1.3 Correcting for normality of HCl 13
9.1.4 Percentage of biodegradation from CO2 evolved 14
9.2 Assessment of biodegradation by IR (method B) 14
9.2.1 Determination of the organic carbon content 14
9.2.2 Determination of the amount of CO2 produced 15
9.2.3 Percentage of biodegradation from CO data2 15

10 Expression of results 20

11 Validity of results 20

12 Test report 20

Annex A (informative) Determination of the degree and rate of degradation of the material 21

Annex B (informative) Quantitative determination of leather biodegradation 24

Annex C (informative) Comparative biodegradability using different waste waters 28

Bibliography 29