

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 Terms and definitions		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 CO ₂ produced		13
9.1.3 Correcting for normality of HCl		13
9.1.4 Percentage of biodegradation from CO ₂ 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 CO ₂ produced		15
9.2.3 Percentage of biodegradation from CO ₂ data		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