

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Symbols and abbreviated terms
5	Principle
5.1	General
5.2	Assessment of biodegradation by manual titration; method A
5.3	Assessment of biodegradation by infrared (IR) detection; method B
6	Chemicals
7	Apparatus and materials
8	Procedure
8.1	Collection and preparation of the inoculum
8.2	Preparation of the test material and reference material
8.3	Test conditions and incubation period
8.4	Termination of the test
9	Quantification
9.1	Assessment of biodegradation by manual titration (method A)
9.1.1	Determination of the organic carbon content
9.1.2	Determination of the amount of CO ₂ produced
9.1.3	Correcting for normality of HCl
9.1.4	Percentage of biodegradation from CO ₂ evolved
9.2	Assessment of biodegradation by IR (method B)
9.2.1	Determination of the organic carbon content
9.2.2	Determination of the amount of CO ₂ produced
9.2.3	Percentage of biodegradation from CO ₂ data
9.2.3.1	General
9.2.3.2	Expression of the total number of moles of CO ₂ evolved
9.2.3.3	Conversion of moles of CO ₂ evolved into mg of CO ₂ evolved
9.2.3.4	Calculation of the CO ₂ mass present in the initial test sample
9.2.3.5	Calculation of the CO ₂ mass evolved from the initial sample
9.2.3.6	Calculation of the percentage of biodegradation
9.2.3.7	Calculation sequence for the determination of sample biodegradation
10	Expression of results
11	Validity of results
12	Test report
Annex A	(informative) Determination of the degree and rate of degradation of the material
Annex B	(informative) Quantitative determination of leather biodegradation
Annex C	(informative) Comparative biodegradability using different waste waters