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Plastics — Determination of the ultimate anaerobic biodegradation of plastic materials in an aqueous system — Method by measurement of biogas production

Plastiques — Évaluation de la biodégradabilité anaérobie ultime des matériaux plastiques en milieu aqueux — Méthode par détermination de la production de biogaz



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Foreword

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Introduction

With the increasing use of plastics, their recovery and disposal have become a major issue. As a first priority, recovery should be promoted. For example plastic litter, which originates mainly from consumers, is difficult to recover completely. Additional examples of materials difficult to recover are found in the disposal of fishing tackle, agricultural mulch films and water-soluble polymers. These plastic materials tend to leak from closed waste management infrastructures into natural environments. Biodegradable plastics are now emerging as one of the available options to solve such environmental issues. Plastic materials such as products or packaging which are sent to anaerobic treatment facilities should be potentially biodegradable. Therefore it is very important to determine the potential biodegradability of such materials and to obtain a quantitative measure of their biodegradability in anaerobic environments.