DIN EN 16087-1:2020-04 (E)

Soil improvers and growing media - Determination of the aerobic biological activity - Part 1: Oxygen uptake rate (OUR)

Contents

Page

European Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and Definitions 4

4 Principle 4

5 Apparatus 4
5.1 Testing facility 4
5.2 Pressure transducer 4
5.3 CO2-absorbent containing unit 5
5.4 Reaction vessel 5
5.5 Mixing device 5
5.6 Balance 5
5.7 pH meter 5
5.8 Dispenser 5
5.9 Glassware 5
5.10 Sieve 5

6 Reagents 5
6.1 Water of class 3 5
6.2 pH buffer 5
6.3 Macronutrient solution 5
6.4 Micronutrient solution 5
6.5 Complete nutrient solution 6
6.6 Nitrification inhibitor 6
6.7 CO2-absorbent 6
6.8 NaOH (0,5 mol/l) 6
6.9 HCl (0,5 mol/l) 6

7 Procedure 6
7.1 Sample preparation 6
7.2 Determination of moisture content and organic matter content 6
7.3 Starting the procedure 6
7.4 Respiration measurement 7

8 Calculations 8
8.1 Theoretical background 8
8.2 Calculations 8

9 Test report 9

Annex A (informative) Validation 10

Annex B (informative) Specific information on the OUR-test 11

Bibliography 13