DIN EN 15845:2010-05 (E)

Paper and board - Determination of the cytotoxicity of aqueous extracts

Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Terms and definitions 4

4 Principle 5

5 Reagents 5

6 Cell line 6
6.1 Generating the cell strain 6
6.2 Maintaining the cell strain 7
6.3 Storing the cell strain 7

7 Food simulants used for testing 7

8 Cleaning laboratory glassware 7
8.1 Cleaning fluids for laboratory glassware 7
8.2 Cleaning procedure for laboratory glassware 8
8.3 Alternative cleaning procedure 8

9 Equipment 8
9.1 Equipment for the migration test 8
9.2 Cell culture equipment 8
9.3 Equipment used for cytotoxicity testing 9

10 Preparation of specimens 10
10.1 General 10
10.2 Paper and board intended for wet contact 10

11 Cytotoxicicity assessment 10
11.1 Principle 10
11.2 General 10
11.3 Preparation of samples 11
11.4 Preparation of the reference sample, control sample and the positive control sample 11
11.5 Incubation of cells obtained from monolayer culture 11
11.6 Preparation of the chromatography sheet 12
11.7 Kinetics of uridine incorporation in the cell RNA 12

12 Expression of results 13
12.1 Graphic representation of the results (to be generated for each tube) 13
12.2 Calculation of percentage RNA synthesis and the validity of the test 13

13 Interpretation of the results 15
13.1 Results for the reference sample 15
13.2 Results of the positive control sample 15
13.3 Results for the test sample 15

14 Precision 15

15 Test report 16

Annex A (informative) Pyrodistilled water 17

Bibliography 18