

DIN EN ISO 4589-3:2017-08 (E)

Plastics - Determination of burning behaviour by oxygen index - Part 3: Elevated-temperature test (ISO 4589-3:2017)

Contents	Page
European foreword	4
Foreword	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Principle	8
5 Apparatus	8
5.1 Arrangement	8
5.2 Test chimney	8
5.3 Test specimen holder	9
5.4 Gas supplies	9
5.5 Gas control devices	9
5.6 Oxygen analyser	9
5.7 Flame ignite	10
5.8 Timing device	10
5.9 Fume extraction system	10
6 Calibration and maintenance of equipment	10
7 Preparation of test specimens	10
7.1 Sampling	10
7.2 Test specimen dimensions and preparation	10
7.3 Marking of test pieces	10
7.4 Conditioning	10
8 Procedure	11
8.1 Setting up the apparatus and test specimen	11
8.2 Igniting the test specimen	11
8.3 Assessing burning behaviour	11
8.4 Selecting successive volume fractions of oxygen	11
8.5 Determining the preliminary volume fraction of oxygen	11
8.6 Volume fraction of oxygen changes	12
9 Calculations and expression of results	12
10 Comparison with a specified minimum value of the temperature index at a specified temperature (short procedure)	12
11 Precision	12
12 Test report	12
Annex A (normative) Measurement of flammability temperature (FT)	18

A.1	Setting up the apparatus	18
A.2	Igniting the test specimen	19
A.3	Assessing burning behaviour	19
A.4	Selecting successive test temperatures	19
A.5	Determining flammability temperature	19
A.6	Test report	20
Annex B (informative) Interlaboratory test data on flammability temperature		21
Annex C (informative) Typical test results sheet		22
Bibliography		25