

DIN EN 1839:2012-12 (E)

Determination of explosion limits of gases and vapours

Contents		Page
Foreword		4
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Test Methods	7
4.1	Method T ("tube" method)	7
4.1.1	Principle	7
4.1.2	Reagents and Materials	7
4.1.3	Apparatus	8
4.1.4	Preparation of the test mixture	10
4.1.5	Procedure	10
4.2	Method B ("bomb" method)	11
4.2.1	Principle	11
4.2.2	Reagents and materials	11
4.2.3	Apparatus	11
4.2.4	Preparation of the test mixture	13
4.2.5	Procedure	13
4.3	Recording of results	15
4.4	Test report	15
Annex A (normative) Method for determination of the explosion limits of substances that are difficult to ignite		17
A.1	Background	17
A.2	Explanation	17
A.3	Apparatus	17
A.4	Safety equipment	18
A.5	Preparation of the test mixture	18
A.6	Procedure	18
Annex B (informative) Examples to describe flame detachment		20
Annex C (informative) Example of recommended evaporator equipment		21
Annex D (normative) Safety measures		23
D.1	General	23
D.2	General safety measures	23
D.3	Additional safety measures concerning the tube method	23
Annex E (informative) Example of a form expressing the results) Test report		24
Annex F (normative) Verification		25
Annex G (informative) Conversion of the values for the explosion limits		27
G.1	Abbreviations and symbols	27
G.2	Substance characteristics of air	27

G.3	Definitions	28
G.4	Mixture preparation	28
G.5	Conversion	29
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC		32
Bibliography		33