

ISO 4626:2023-07 (E)

Volatile organic liquids - Determination of boiling range of organic solvents used as raw materials

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Apparatus	2
6	Sampling	9
7	Assembly and preparation of apparatus	10
7.1	Assembly	10
7.1.1	General	10
7.1.2	Position and choice of thermometer	10
7.1.3	Support for flask	10
7.1.4	Connection of flask to condenser	10
7.2	Filling of cooling bath	10
7.3	Adjustment of temperature of sample	10
8	Procedure	11
8.1	Test portion	11
8.2	Apparatus assembly	11
8.3	Operating conditions	11
8.3.1	General	11
8.3.2	Materials with boiling point below 150 °C	11
8.3.3	Materials with boiling point above 150 °C	11
8.4	Initial boiling point	12
8.5	Distillation	12
8.6	Dry point	12
8.7	End point	12
8.8	Atmospheric pressure	12
8.9	Recovery	12
8.10	Distillation loss	12
9	Notes on procedure	13
9.1	Factors causing superheating	13
9.2	Flame in contact with the flask	13
9.3	Application of heat	13
9.4	Extraneous heat source	13
9.5	Condition of equipment	13
9.6	Use of electric heaters	13
9.7	Safety precautions	13
9.7.1	Peroxide formation	13
9.7.2	Flammability	14
10	Calculations	14
10.1	Thermometer bore correction	14

10.2	Thermometer bulb shrinkage correction	14
10.3	Barometer correction	14
10.4	Combined corrections	15
10.5	Precision	15
10.5.1	General	15
10.5.2	Repeatability, r	15
10.5.3	Reproducibility, R	15
11	Test report	16
Annex A (normative) Thermometer to be used, normal boiling point and boiling point correction factor		17
Annex B (informative) Test for peroxides		20
Bibliography		21