

ISO 13885-1:2008-08 (E)

Binders for paints and varnishes - Gel permeation chromatography (GPC) - Part 1: Tetrahydrofuran (THF) as eluent

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Principle	2
5	Apparatus	2
5.1	General	2
5.2	Eluent supply	2
5.3	Pump	2
5.4	Injection system	3
5.5	Columns	3
5.6	Column temperature control	4
5.7	Detector	4
5.8	Data acquisition	5
6	Eluent	5
7	Calibration of the apparatus	5
7.1	General	5
7.2	Specification for the calibration standard	5
7.3	Preparation of the calibration solutions for injection	6
7.4	Conditions for calibration runs	7
7.5	Measurement of retention volume/time	7
7.6	Plotting the calibration curve	7
8	Sampling	7
9	Preparation for the test	8
9.1	Preparation of the injection solution	8
9.2	Preparation of the apparatus	8
10	Conditions of analysis	8
11	Data acquisition and evaluation	9
11.1	General	9
11.2	Calculation of the net chromatogram from the raw data	9
11.3	Calculation of the average values	10
11.4	Calculation of the distribution curves	11
12	Precision	12
12.1	General	12
12.2	Repeatability	12
12.3	Reproducibility	12
13	Test report	13
13.1	General	13
13.2	General data on the equipment and settings	13
13.3	Special data on the sample	14

Annex A (normative) Calculation of experimental parameters for different column sizes	17
Annex B (informative) Example of a data sheet for a polymer standard	18
Annex C (informative) Further information	19
Bibliography	23