

DIN EN ISO 22007-4:2024-04 (E)

Plastics - Determination of thermal conductivity and thermal diffusivity - Part 4: Light flash method (ISO 22007-4:2024)

Contents	Page
European foreword	3
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Principle	6
5 Apparatus	6
5.1 General	6
5.2 Furnace or climatic chamber	6
5.3 Flash source	8
5.4 Transient detectors	8
5.5 Thickness measurement device	9
6 Test specimen	9
6.1 Shape and dimension of the specimen	9
6.2 Preparation and conditioning of test specimen	9
6.3 Coating the specimen	9
7 Calibration and verification	10
7.1 Calibration of apparatus	10
7.2 Verification of apparatus	10
8 Procedure	10
9 Data analysis	11
10 Uncertainty	13
11 Test report	13
Annex A (informative) Correction for finite pulse duration	14
Annex B (informative) Alternative methods of calculating thermal diffusivity	15
Annex C (normative) Samples and test specimen preparation for injection mouldable thermoplastics and thermosets	16
Bibliography	20