

ISO 22007-4:2024-01 (E)

Plastics - Determination of thermal conductivity and thermal diffusivity - Part 4: Light flash method

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Apparatus	2
5.1	General	2
5.2	Furnace or climatic chamber	2
5.3	Flash source	4
5.4	Transient detectors	4
5.5	Thickness measurement device	5
6	Test specimen	5
6.1	Shape and dimension of the specimen	5
6.2	Preparation and conditioning of test specimen	5
6.3	Coating the specimen	5
7	Calibration and verification	6
7.1	Calibration of apparatus	6
7.2	Verification of apparatus	6
8	Procedure	6
9	Data analysis	7
10	Uncertainty	9
11	Test report	9
Annex A (informative) Correction for finite pulse duration		10
Annex B (informative) Alternative methods of calculating thermal diffusivity		11
Annex C (normative) Samples and test specimen preparation for injection mouldable thermoplastics and thermosets		12
Bibliography		16