

ISO 4097:2020 (E)

Rubber, ethylene-propylene-diene (EPDM) — Evaluation procedure

Contents

	Foreword
1	Scope
2	Normative references
3	Terms and definitions
4	Sampling and sample preparation
5	Physical and chemical tests on raw rubber
5.1	Mooney viscosity
5.2	Volatile matter
5.3	Ash
6	Preparation of test mixes for evaluation
6.1	Standard test formulations
6.2	Equipment and procedure
6.3	Mixing procedures
6.3.1	General
6.3.2	LIM mixing for methods A1, A2, and A3
6.3.2.1	General
6.3.2.2	Method A1 — Single stage mixing with LIM
6.3.2.3	Method A2 — Two-stage mixing with LIM
6.3.2.3.1	Initial mixing procedure
6.3.2.3.2	Final mixing procedure
6.3.2.4	Method A3 — Two-stage mixing using a LIM for initial mixing and a mill for final mixing
6.3.2.4.1	Stage 1 — Initial mixing procedure
6.3.2.4.2	Stage 2 — Final mill mixing procedure
6.3.3	Method B — Mill mixing
7	Evaluation of vulcanization characteristics by a curemeter test
7.1	Using an oscillating-disc curemeter
7.2	Using a rotorless curemeter
8	Evaluation of tensile stress-strain properties of vulcanized test mixes
9	Precision
10	Test report
Annex A	(informative) Precision
A.1	General
A.2	Results
A.2.1	General
A.2.2	Repeatability
A.2.2.1	Curemeter properties
A.2.2.2	Stress-strain properties
A.2.3	Reproducibility
A.2.3.1	Curemeter properties
A.2.3.2	Stress-strain properties
A.2.4	Bias