

ISO 28641:2026-08 (E)

Rubber compounding ingredients - Organic chemicals - General test methods

Contents	Page
Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	2
5 General requirements	2
5.1 Thermometer	2
5.2 Desiccator	2
6 Sampling	2
6.1 Apparatus	2
6.2 Sampling method	2
7 Test methods	2
7.1 Density and relative density	2
7.1.1 General	2
7.1.2 Hydrometer method	3
7.1.3 Pyknometer method	3
7.1.4 Expression of results	5
7.1.5 Test report	6
7.2 Loss on heating	6
7.2.1 General	6
7.2.2 Method A	6
7.2.3 Method B	7
7.2.4 Precision	9
7.2.5 Method C	9
7.2.6 Expression of results	12
7.2.7 Test report	12
7.3 Sieve residue	13
7.3.1 General	13
7.3.2 Principle	13
7.3.3 Reagents	13
7.3.4 Apparatus	13
7.3.5 Procedure	13
7.3.6 Calculation	14
7.3.7 Expression of results	14
7.3.8 Precision	14
7.3.9 Test report	14
7.4 pH of water extract	14
7.4.1 Principle	14
7.4.2 Apparatus	15
7.4.3 Procedure	15
7.4.4 Test report	16
7.5 Melting point	16
7.5.1 General	16
7.5.2 Method A1	16
7.5.3 Method B	18

7.5.4	Method C	19
7.5.5	Expression of results	21
7.5.6	Precision	21
7.5.7	Test report	21
7.6	Temperature of solidification	21
7.6.1	Principle	21
7.6.2	Apparatus	21
7.6.3	Procedure	22
7.6.4	Expression of results	23
7.6.5	Test report	24
7.7	Softening point	24
7.7.1	General	24
7.7.2	Principle	24
7.7.3	Apparatus	24
7.7.4	Procedure	25
7.7.5	Expression of results	26
7.7.6	Precision	26
7.7.7	Test report	26
7.8	Density of the bulk material	26
7.8.1	Principle	26
7.8.2	Method A (constant mass method)	26
7.8.3	Method B (constant volume method)	28
7.8.4	Test report	28
7.9	Ash	29
7.9.1	Principle	29
7.9.2	Apparatus	29
7.9.3	Procedure	29
7.9.4	Calculation	29
7.9.5	Expression of results	30
7.9.6	Precision	30
7.9.7	Test report	30
7.10	Refractive index	30
7.10.1	Principle	30
7.10.2	Apparatus	30
7.10.3	Procedure	31
7.10.4	Expression of results	32
7.10.5	Precision	32
7.10.6	Test report	32
Annex A (normative) Verification of accuracy of pH-meter		34
Annex B (normative) Calibration of the pH-meter		38
Annex C (informative) Precision		40
Annex D (informative) Conversion formulae between density and relative density		46
Annex E (normative) Automatic measurement methods of melting point		47
Bibliography		51