

Standard Reference Elastomers (SRE): BAM-E001

Comparative standard reference compound No. 1 for abrasion testing according to ISO 4649

Further standards which refer to the standard reference elastomer (SRE) are:

ISO 20871; section 4.5

EN 388; section C.2.6

EN 12770; section 4.5

EN ISO 177; section 5.6

EN ISO 20344; section 8.3

ASTM D 5963-2004; Annex A1.1

1. Scope and field application

Standard reference compound No. 1 is used for comparative abrasion tests described in the above mentioned standards. It establishes a uniform, steady level of abrasion loss. This level is defined as 200 mg mass loss under definite test conditions (ISO 4649: method A).

2. Formulation of the rubber mixture

parts by mass

a) Natural rubber SMR	100.0
b) Antidegradant IPPD (Vulkanox 4010 NA)	1.0
c) Zinc oxide (Zinkweiß G 9)	50.0
d) Carbon black N 330 (Corax N 330)	36.0
e) Accelerator MBTS (Vulkacit DM)	1.8
f) Sulphur	2.5

Conditions of vulcanisation: 150 °C, 25 min

3. Specifications

b) Hardness according to ISO 48-4	(60 ± 3) Shore A
a) Density according to ISO 1183-1	(1.35 ± 0.02) g/cm ³
c) Mass loss of a production run, according to DIN ISO 4649, measured with 15 test pieces, cut from a representative sheet, mean value of 15 medians of 3 runs for each test piece	(210 ± 10) mg

4. Dimensions

8 mm x 181 mm x 181 mm
(which will yield approximately 90 test pieces)

5. Storage

Cool, dry, protected from light and kept in a protective cover (e.g. polyethylene bag) completely closed.

6. Guarantee

If used properly: 3 years.

7. Identification

The standard reference elastomeric sheet is labelled indicating the producer (BAM), the year of production, the standard, the type of SRE and serial number.

The SRE is produced, certified and supplied by

Bundesanstalt für Materialforschung und -prüfung (BAM)

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