

DIN ISO 23529:2020-10 (E)

Rubber - General procedures for preparing and conditioning test pieces for physical test methods (ISO 23529:2016)

Contents	Page
Foreword	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	8
4 Identification and record keeping	8
5 Standard laboratory conditions	9
5.1 Standard laboratory temperature	9
5.2 Standard laboratory humidity	9
5.3 Other conditions	9
6 Storage of samples and test pieces	9
7 Preparation of test pieces	10
7.1 Test piece thickness	10
7.2 Thickness adjustment	10
7.2.1 General	10
7.2.2 Techniques	10
7.2.3 Equipment for test piece preparation	11
7.3 Test piece cutters	12
7.3.1 General	12
7.3.2 Fixed-blade cutters	12
7.3.3 Replaceable-blade cutters	13
7.3.4 Rotary cutters	13
7.4 Maintenance of cutters	13
7.5 Preparation of test pieces by moulding	13
7.5.1 Test sheets	13
7.5.2 Test pieces	13
7.5.3 Thermoplastic materials	13
7.6 Preparation of unvulcanized test pieces	14
8 Conditioning	14
8.1 General	14
8.2 Conditioning times for subnormal or elevated temperatures	14
9 Measurement of the dimensions of test pieces	14
9.1 Method A -- For dimensions less than 30 mm	14
9.2 Method B -- For dimensions of 30 mm and up to and including 100 mm	15
9.3 Method C -- For dimensions over 100 mm	15
9.4 Method D -- Non-contact method	15
10 Conditions of test	16
10.1 Duration of test	16
10.2 Temperature and humidity	16
10.2.1 Standard laboratory temperature and humidity	16
10.2.2 Other test temperatures	16

National Annex NA (informative) Bibliography	6
National foreword	4
11 Test chambers	17
11.1 General requirements for temperature-controlled chambers	17
11.2 Chambers operating at elevated temperatures	18
11.2.1 Chambers with gaseous heat-transfer media	18
11.2.2 Chambers with liquid heat-transfer media	18
11.2.3 Fluidized beds	18
11.3 Chambers operating at subnormal temperatures	18
11.3.1 Mechanically refrigerated units	18
11.3.2 Solid carbon dioxide units (direct-cooling type)	18
11.3.3 Solid carbon dioxide units (indirect-cooling type)	18
11.3.4 Packaged refrigeration units	18
11.3.5 Liquid nitrogen	18
12 Test report	19
Annex A (normative) Conditioning times for rubber test pieces	20
Bibliography	23