Designation: D 1349 – 07

Standard Practice for Rubber—Standard Temperatures for Testing[1]

This standard is issued under the fixed designation D 1349; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This practice covers a list of standard temperatures from which selection may be made for any specific test or test method. Any standard or specification that specifies test temperatures not listed shall take precedence over this practice.

1.2 These temperatures do not apply to mixing, processing, or vulcanizing temperatures for rubber compounds. Any standard requiring preparation of a particular rubber compound should specify the conditions to be used.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Test Temperatures

2.1 The test temperatures are as follows:

°C	°F
–75	–103
–55	–67
–40	–40
–25	–13
–10	14
0	32
23	73.4
40	104
55	131
70	158
85	185
100	212
125	257
135	275
150	302
160	320
175	347
200	392
225	437
250	482
275	527
300	572

2.2 Tolerances for the test temperature, unless otherwise specified in a particular method, shall be ±2°C or ±3.6°F. This tolerance is the maximum allowable variation in the temperature of the space enclosing the specimens being tested. The average temperature of the space shall be as close as practicable to the specified temperature.

2.3 Unless otherwise specified, conditioning and testing of materials known to be sensitive to variations in temperature or relative humidity, shall be carried out at a temperature of 23 ± 2°C (73.4 ± 3.6°F) and a relative humidity of 50 ± 5 %.

3. Keywords

3.1 standard test temperatures

[1] This practice is under the jurisdiction of ASTM Committee D11 on Rubber and is the direct responsibility of Subcommittee D11.14 on Time and Temperature-Dependent Physical Properties.

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