



Standard Specification for Flexible Cellular Materials Made From Polyolefin Plastics¹

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1. Scope

1.1 This specification applies to flexible closed-cell materials made from polyolefin plastics and blends of polyolefin plastics as defined in Section 3.

1.2 Extruded or molded shapes too small to permit the cutting of standard test specimens are difficult to classify or test by standard test methods and will usually require special testing procedures or the use of standard test sheets.

1.3 In case of conflict between the provisions of this specification and those of detailed specifications for a particular product, the latter shall take precedence. These detailed specifications for the flexible closed-cell polyolefin plastic foams should state the particular test or tests desired.

1.4 In cases involving referee decisions, SI units shall be used.

1.5 This specification does not contain test procedures or values for all the suffix letters listed in Table 1 and Table 2. Where the procedure is not described in this specification or special limits are desired, or both, the test procedures and values must be arranged between the purchaser and the supplier.

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

NOTE 1—There is no similar or equivalent ISO standard.

2. Referenced Documents

2.1 ASTM Standards:

C 518 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus²

D 412 Test Methods for Vulcanized Rubbers and Thermoplastic Rubbers and Thermoplastic Elastomers—Tension³

D 624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers³

D 1596 Test Method for Dynamic Shock Cushioning Char-

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² Annual Book of ASTM Standards, Vol 04.06.

³ Annual Book of ASTM Standards, Vol 09.01.

TABLE 1 Suffix Letter Designations

A	Heat resistance
B	Compression set under constant deflection
C	Ozone or weather resistance
D	Compression deflection
E	Oil resistance
F	Low temperature
G	Tear resistance
H	Flex resistance
I	Not assigned
J	Abrasion resistance
K	Adhesion capability
L	Water absorption
M	Flammability resistance
N	Impact resistance
O	Electrical properties
P	Staining resistance
Q	Not assigned
R ₁	Resilience
R ₂	Shock absorption
S	Thermal stability
T ₁	Tensile strength
T ₂	Ultimate elongation
U	Not assigned
V	Thermal conductivity
W	Density
X	Not assigned
Y	Not assigned
Z	Special requirements
AA	Buoyancy
BB	Compressive creep
CC	Dynamic cushioning
DD	Open cell
EE	Not assigned
FF	Water vapor transmission

acteristics of Packaging Materials⁴

D 2863 Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)⁵

D 3575 Test Methods for Flexible Cellular Materials Made from Olefin Polymers⁶

E 96 Test Methods for Water Vapor Transmission of Materials²

F 355 Test Method for Shock Absorbing Properties of Playing Surface Systems and Materials⁷

2.2 Motor Vehicle Safety Standard:

⁴ Annual Book of ASTM Standards, Vol 15.09.

⁵ Annual Book of ASTM Standards, Vol 08.02.

⁶ Annual Book of ASTM Standards, Vol 09.02.

⁷ Annual Book of ASTM Standards, Vol 15.07.