



Standard Terminology Relating to Electrical Insulation¹

This standard is issued under the fixed designation D1711; 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.

INTRODUCTION

This terminology is used in connection with testing and specifying solid electrical insulating materials. Modifications to this terminology, reflecting common usage, may appear in particular test methods, material specifications, practices, or other standards. Included herein are terms pertinent to general applications, electrical insulating papers, mica, mica processing, processed mica forms, hookup wire insulation, and partial discharge (corona).

1. Scope*

1.1 This terminology standard is a compilation of technical terms associated with testing and specifying solid electrical and electronic insulating materials.

1.2 This terminology standard shall contain all definitions that are balloted specifically through Subcommittee D09.94 and through D09 main committee and that are of general interest to standards associated with electrical and electronic insulating materials. Those definitions shall be of importance to electrical and electronic insulating materials issues but need not be directly associated with a specific standard under the jurisdiction of Committee D09 on Electrical and Electronic Insulating Materials.

1.3 It is intended that all definitions in this terminology standard originating in a specific standard under the jurisdiction of Committee D09 be identical to definitions of the same terms as printed in standards of originating technical subcommittees, with the exceptions of: (1) deletion of any part of the Discussion included in another standard that refers specifically to the use of a term in that standard; (2) figure numbers and corresponding references; and (3) in this terminology standard, a parenthetical addition of a reference to one or more technical standards in which the term is used and the year in which the term was added to this compilation.

1.3.1 Definitions contained in this terminology standard which did not originate in a specific standard under the jurisdiction of Committee D09, or which originated in a standard that has since been revised or withdrawn, and that have been appropriately balloted, shall also be included in this

terminology standard.

1.4 It is permissible to include symbols as part of the representation of terms, where appropriate.

1.5 It is not intended that this terminology standard include symbols (except as noted in 1.4). It is also permissible to include acronyms and abbreviations referring directly to defined terms.

1.6 Revisions and additions to those definitions in this terminology standard which originate in a specific standard under the jurisdiction of Committee D09 are to be made as a product of a collaborative effort between Subcommittee D09.94 and the corresponding technical subcommittee of Committee D09, with Subcommittee D09.94 providing editorial advice to the technical subcommittees.

1.7 Each definition in this terminology standard shall be accompanied by the year in which it was first incorporated into the standard, placed at the end in parentheses. All discussions shall also carry a date; it is possible that the discussion date is different from the definition date.

2. Referenced Documents

2.1 ASTM Standards:²

- D149 Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies
- D150 Test Methods for AC Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulation
- D470 Test Methods for Crosslinked Insulations and Jackets for Wire and Cable

¹ This terminology is under the jurisdiction of ASTM Committee D09 on Electrical and Electronic Insulating Materials and is the direct responsibility of Subcommittee D09.94 on Editorial.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.