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Standard Test Method for Water in Insulating Liquids by Coulometric Karl Fischer Titration¹

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

1. Scope

1.1 This test method covers the measurement of water present in insulating liquids by coulometric Karl Fischer titration. This test method is used commonly for test specimens below 100 % relative saturation of water in oil. The coulometric test method is known for its high degree of sensitivity (typically 10 µg H₂O). This test method requires the use of equipment specifically designed for coulometric titration.

1.2 This test method recommends the use of commercially available coulometric Karl Fischer titrators and reagents.

1.3 The values stated in SI units are to be regarded as the standard.

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 practice and determine the applicability of regulatory limitations prior to use.* For specific precautionary statements see 8.1 and Note A2.1.

2. Referenced Documents

2.1 ASTM Standards:

¹ This test method is under the jurisdiction of ASTM Committee D-27 on Electrical Insulating Liquids and Gases and is the direct responsibility of Subcommittee D27.06 on Chemical Test.

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