Australian Standard™

Geotextiles—Methods of test

Method 11: Determination of durability—Resistance to degradation by light, heat and moisture

FOREWORD

This test method details the determination of durability of a geotextile with regard to degradation in tensile strengths caused by exposure to intense ultraviolet light and heat using a controlled xenon-arc light source. The method is an index test only; results may vary with different types and thicknesses of fabric. The Standard is based on ASTM D4355 *Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus*.

METHOD

1 SCOPE

This Standard sets out a method for determining the durability of geotextiles when subjected to degradation by artificial light and heat.

NOTES:

1 As the artificial light source produces heat, it is expedient to combine the tests for these two agencies of degradation.

2 If the product is subjected to prolonged high temperatures, a separate oven-ageing method may be more suitable for testing resistance to degradation due to heat.

2 APPLICATION

The method is applicable to all geotextiles.

NOTES:

1 The test does not give an absolute measure of the potential degradation of any particular geotextile. The correlation between this test and actual exposure is variable with different materials and conditions.

2 Further information on the correlation of testing and actual exposure may be found in 'Correlation of Laboratory to Natural Weathering' by George W. Glossman, *Journal of Coatings Technology*, Oct 1977 (vol.49), no 633, pp. 44-45.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2001 Methods of test for textiles
2001.1.1 Method 1.1 Conditioning procedures

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