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Standard Specification for Radiation Attenuating Protective Gloves[1]

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Note—Subsection 1.1 was corrected editorially and the year date was changed on December 1, 2014.

1. Scope

1.1 To describe the requirements for packaged protective gloves with radiation attenuating properties intended to protect the operator or other persons from unnecessary exposure to radiation during radiological procedures by providing an attenuating barrier to radiation. Minimum attenuation values will be defined.

1.2 *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. Referenced Documents

2.1 *ASTM Standards:*[2]

F2547 Test Method for Determining the Attenuation Properties in a Primary X-ray Beam of Materials Used to Protect Against Radiation Generated During the Use of X-ray Equipment

3. Classification

3.1 Gloves compounded from natural rubber latex, rubber cement or synthetic polymers.

4. Materials and Manufacture

4.1 Any natural or synthetic compound with lead, bismuth, tungsten, barium, or other metallic content that permits the glove to meet the requirements of this specification.

5. Attenuation Requirements

5.1 The radiation attenuation of the glove shall be determined by using Test Method F2547.

5.1.1 Sample size shall be 13 gloves.

5.1.2 A 5 by 5 cm square sample shall be taken from the thinnest portion of the glove (either the palm, cuff, or finger).

5.2 A radiation attenuation glove must attenuate per the minimum values shown in the following table at each kVp level:

60 kVp	80 kVp	100 kVp	120 kVp
29 %	22 %	18 %	15 %

6. Labeling Requirements

6.1 The final glove packaging shall be labeled as a Radiation Attenuating Protective Glove.

6.2 The average attenuation values for the glove shall be included on the glove packaging.

7. Keywords

7.1 glove; radiation attenuation; x-ray

[1] This specification is under the jurisdiction of ASTM Committee D11 on Rubber and is the direct responsibility of Subcommittee D11.40 on Consumer Rubber Products.

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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.