ANSI/ISEA 105-2016
Revision of ANSI/ISEA 105-2011

American National Standard for Hand Protection Classification

Secretariat
International Safety Equipment Association

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American National Standards Institute, Inc.

American National Standard

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Foreword (This Foreword is not part of American National Standard ANSI/ISEA 105-2016)

OSHA requires that employers select and require employees to use appropriate hand protection where there is workplace exposure to hazards such as chemical burns or severe cuts and lacerations. OSHA also mandates that such selection be based on an evaluation of performance characteristics of hand protection relative to the tasks being performed.

ANSI/ISEA 105-2016 is the latest revision of a voluntary industry consensus standard that was first published in 1999 and revised in 2005 and 2011. The document classifies a whole glove or material used in the construction of an occupational glove to help people understand glove performance data if they are not familiar with the details of the test methods and the results to be expected when testing. Such classifications can assist employers and product users in the appropriate specification and selection of gloves for specific workplace exposures. This document provides or refers to appropriate test methods for specified criteria and provides pass/fail criteria to allow users to interpret test results and determine if certain hand protection products meet their needs.

One of the major changes in this fourth edition of ANSI/ISEA 105 surrounds the determination of classification for cut-resistance. For purposes of classifying a glove to this standard, a single test method has been selected in an effort to provide consistent meaning of the ratings from the end-user perspective. In addition, the number of classification levels has been expanded to address the disparate gap among certain levels seen in earlier versions and to model the approach used in similar international standards.

Additional updates include the incorporation of a needlestick puncture test, recognizing that this is a common potential exposure for the medical, sanitation and recycling industries. Cited test methods have been updated throughout the standard to reflect the state of the art in materials performance and technology and to harmonize with other existing standards, where possible.

This revision was prepared by members of the Hand Protection Group of the International Safety Equipment Association (ISEA). The following companies were members of the group at the time of the approval of the standard:

Ansell Protective Products
DSM Dyneema
Ergodyne
D3O
DuPont Personal Protection
HexArmor
Honeywell Safety Products
Kimberly-Clark Professional
Lakeland Industries, Inc.
Magid Glove and Safety Mfg. Co. LLC
MCR Safety
National Safety Apparel
OccuNomix International LLC
Protective Industrial Products Inc.
Radians Inc.
Saf-T-Gard International
World Fibers, Inc.

This standard was approved using consensus procedures prescribed by the American National Institute. The following organizations were contacted prior to the approval of this standard. Inclusion in this list does not necessarily imply that the organization concurred with the submittal of the proposed standard to ANSI.

Apollo Performance Gloves
Arauca North America
Arcadis-US
Associated Milk Producers, Inc.
Atlas Contractors
Boise Cascade
Cudd Energy Services
FNF Inc.
International Personnel Protection, Inc.
Leggett
Los Angeles Department of Water and Power
MAPA Professional
Milwaukee Tool
National Institute for Standards and Technology
National Waste & Recycling Association
Noble Corporation
Schlumberger
Stony Brook University Hospital
SW Research Inc.
UL, LLC
United Scrap Metal, Inc.
WestRock
Waste Management
Youngstown Glove

Inquiries related to the standard and suggestions to improve the document can be emailed to isea@safetyequipment.org.

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