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Checking the Net Contents of Packaged Goods

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Abstract

This handbook has been prepared as a procedural guide for the compliance testing of net content statements on packaged goods. Compliance testing of packaged goods is the determination of the conformance results of packaging, distribution, and sale of commodities to specific legal requirements for net content declarations. This handbook has been developed primarily for the use of state, local, and some federal officials. However, it should be useful to commercial and industrial establishments areas of packaging, distribution, and sale of commodities.

NIST has statutory responsibility for "cooperation with states in securing uniformity of weights and measures laws and methods of inspection and publishes this and other NIST Handbooks in partial fulfillment of this responsibility. This 2025 edition includes amendments made through the Committee on Laws and Regulations of the National Conference on Weights and Measures (NCWM) with technical guidance from the Office of Weights and Measures (OWM) of the National Institute of Standards and Technology (NIST) and input from weights and measures officials and industry representatives. These amendments were adopted by the NCWM at its 109th Annual Meeting in July 2024. There may be years where there are no changes to this NIST Handbook 133; therefore, it would not be published on an annual basis in such instances.

In conducting compliance testing, the conversion of measured quantity values between systems of measurement (e.g., from the metric system to the U.S. customary system) should be handled with careful regard to the implied correspondence between measurement accuracy and the number of digits displayed. For all conversions, the number of significant figures retained should be congruous with the accuracy of the corresponding measurement. For this edition of NIST Handbook 133, all quantity values obtained from devices or through test procedures have been rounded to two significant digits (e.g., 2.5 cm to 1.0 in), or to a precision level applicable to the test equipment (e.g., 200 kPa for 25 psi or 35 MPs for 5000 psi).

Keywords

count; labeling; measures; packaging; testing procedures; testing methods; weight; volume; length; scale; area; thickness.

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