Intent and Scope of NIST Handbook 133
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NIST Handbook 133 was prepared for use as a procedural guide for compliance testing of net content statements on packaged goods. Compliance testing of packaged goods is the determination of the conformance of the results of the packaging, distribution, and retailing process (the packages) with specific legal requirements for net content declarations. The handbook was primarily developed for use by government officials, although it should be useful to commercial and industrial establishments in the areas of packaging, distribution, and sale of commodities. Routine verification of the net contents of packages is an important part of any weights and measures program to facilitate value comparison and fair competition. The procedures in this handbook are recommended for use to verify the net quantity of contents of packages kept, offered, or exposed for sale, at any location (e.g., at the point of pack, in storage warehouses, retail stores, and wholesale outlets). Any commodity sold by weight, measure, or count may be tested. Regardless of where the test occurs (point of pack, wholesale, or retail), each test or “inspection lot” must meet the following criteria:

The net quantity of content statement must be “accurate,” but reasonable variations are permitted. In general, the average net quantity of contents of packages in a lot must at least equal the net quantity of contents declared on the label. Plus or minus variations from the declared net weight, measure or count are permitted when caused by unavoidable variations in weighing, measuring, or counting the contents of individual packages that occur in current good manufacturing practice. Such variations must not be permitted to the extent that the average of the quantities in the packages of a particular commodity or lot (large or small) of the commodity is kept, offered, or exposed for sale or sold is below the stated quantity.

The variation of individual package contents from labeled quantity must not be “unreasonably large.” Under-filled packages by more than the Maximum Allowable Variation specified for the package are considered unreasonable errors. Unreasonable shortages are not generally permitted, although overages in other packages in the same lot, shipment, or delivery compensate for such shortage. The handbook does not specify limits of overfilling.

Generally, the inspection lot is the collection of identically labeled packages available for inspection at any location (retail, wholesale, point of pack) in the distribution chain. This collection of packages will pass or fail as a whole based on the results of tests on a sample drawn from this collection. If the inspection lot fails, no further testing is required although, “follow up” inspections are encouraged. After the evaluation of an inspection lot is reached, the jurisdiction should consider if any further investigation is warranted. An effective net content testing program typically includes testing at all levels of distribution; however, the Committee recognizes this is not always possible. Although
“follow up” inspections are not required to support the determination when a lot has failed a compliance test, the Committee encourages weights and measures officials to work with other jurisdictions to solve problems and obtain corrective actions.