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# Appendix F. Glossary

## A

**allowable difference.** The amount, by which the actual quantity in the package may differ from the declared quantity. Pressed and blown tumblers and stemware labeled by count and capacity are assigned an allowable difference in capacity. This is also called a tolerance.

audit testing. Preliminary tests designed to quickly identify potential noncompliance units.

**average.** The sum of a number of individual measurement values divided by the number of values. For example, the sum of the individual weights of 12 packages divided by 12 would be the average weight of those packages.

**average error.** The sum of the individual "package errors" (defined) (considering their arithmetic sign) divided by the number of packages comprising the sample.

**average requirement.** A requirement that the average net quantity of contents of packages in a "lot" equals the net quantity of contents printed on the label.

**average tare.** The sum of the weights of individual package containers (or wrappers, etc.) divided by the number of containers or wrappers weighed.

#### B

**berry baskets and boxes.** Disposable containers in capacities of 1 dry quart or less for berries and small fruits. See Section 4.46. in NIST Handbook 44.

### С

**Category A (Category B).** A set of sampling plans provided in this handbook to use in checking packages that must (except when exempted) meet the "average requirement" (defined).

chamois. A natural leather made from skins of sheep and lambs that have been oil-tanned.

**combination quantity declarations.** A package label that contains the count of items in the package as well as one or more of the following: weight, measure, or size.

compliance testing. Determining package conformance using specified legal requirements.

### D

**decision criteria.** The rules for deciding whether or not a lot conforms to package requirements based on the results of checking the packages in the sample.

delivery. A quantity of identically labeled product received at one time by a buyer.

**dimensionless units.** The integers in terms of which the official records package errors. The dimensionless units must be multiplied by the "unit of measure" to obtain package errors in terms of weight, length, etc.

**division, value of (d).** The value of the scale division, expressed in units of mass, is the smallest subdivision of the scale for analog indication or the difference between two consecutively indicated or printed values for digital indication or printing. See NIST Handbook 44.

**drained weight.** The weight of solid or semisolid product representing the contents of a package obtained after a prescribed method for removal of the liquid has been employed.

**dry measure.** Rigid containers designed for general and repeated use in the volume measurement of particulate solids. See Section 4.45. Dry Measures in NIST Handbook 44.

**dry pet food.** All extruded dog and cat foods and baked treats packaged in Kraft paper bags and cardboard boxes that have a moisture content of 13 % or less at the time of packaging.

dry tare. See UNUSED DRY TARE.

#### E

error. See PACKAGE ERROR.

#### G

gravimetric test procedure. An analytical procedure that involves measurement by mass or weight.

gross weight. The weight of the package including contents, packing material, labels.

#### Η

headspace. The container volume not occupied by product.

#### Ι

**initial tare sample.** The first packages (either two or five) selected from the sample to be opened for tare determination in the tare procedure. Depending upon the variability of these individual tare weights as compared with the variability of the net contents, this initial tare sample may be sufficient or more packages may be needed to determine the tare.

**inspection lot.** The collection of identically labeled (random packages, in some cases, are exempt from identity and labeled quantity when determining the inspection lot) packages available for inspection at one time. This collection will pass or fail as a whole based on the results of tests on a sample drawn from this collection.

### L

**label.** Any written, printed, or graphic matter affixed to, applied to, attached to, blown into, formed, molded into, embossed on, or appearing upon or adjacent to a consumer commodity or a package containing any consumer commodity, for purposes of branding, identifying, or giving any information with respect to the commodity or to the contents of the package, except that an inspector's tag or other non-promotional matter affixed to or appearing upon a consumer commodity is not a label. See Section 2.5 in the Uniform Packaging and Labeling Regulation in NIST Handbook 130.

linear measures. Rulers and Tape Measures.

**location of test.** The place where the package will be examined. This is broadly defined as one of three general locations: (1) where the commodity was packaged, (2) a warehouse or storage location, or (3) a retail outlet.

lot. See INSPECTION LOT.

**lot code.** A series of identifying numbers and/or letters on the outside of a package designed to provide information such as the date and location of packaging or the expiration date.

lot size. The number of packages in the "inspection lot".

### Μ

#### MAV. See MAXIMUM ALLOWABLE VARIATION

**maximum allowable variation (MAV).** A deficiency in the weight, measure, or count of an individual package beyond which the deficiency is considered to be an "unreasonable error". The number of packages with deficiencies that are greater than the MAV is controlled by the sampling procedure.

**measure containers.** Containers whose capacities are used to determine quantity. They are of two basic types: (a) retail and (b) prepackaged. Retail containers are packaged at the time of retail sale, and prepackaged containers are packaged in advance of sale. An example of a prepackaged measure container is an ice cream package.

**metric or SI units.** Units of the International System of Units as established in 1960 by the General Conference on Weights and Measures and interpreted or modified for the United States by the Secretary of Commerce. (see NIST Special Publication (SP) 811, "Guide for the Use of the International System of Units (SI)" [www.nist.gov/physical-measurement-laboratory/special-publication-811] and SP 330, The International System of Units (SI)" [www.nist.gov/pml/special-publication-330].)

**minus or plus errors.** Negative or positive deviations from the labeled quantity of the actual package quantities as measured. See PACKAGE ERROR.

**moisture allowance.** That variation in weight of a packaged product permitted in order to account for loss of weight due to loss of moisture during good package distribution practices. For packaged goods subject to moisture loss, when the average net weight of a sample is found between the labeled weight and the boundary of the moisture allowance, the lot is said to be in a no-decision area. Further information is required to determine lot compliance or noncompliance.

**mulch.** Any product or material other than peat or peat moss for sale, or sold for primary use as a horticultural, above-ground dressing for decoration, moisture control, weed control, erosion control, temperature control, or other similar purposes.

**multiunit package.** A package containing two or more individual packages of the identical commodity, in the same quantity, intended to be sold as a multiunit package. (Added 2022)

### Ν

**net quantity or net contents.** That quantity of packaged product remaining after all necessary deductions for tare (defined) have been made.

nominal. A designated or theoretical size that may vary from the actual.

**nominal gross weight.** The sum of the nominal tare weight (defined) plus the declared or labeled weight (or other labeled quantity converted to a weight basis).

#### Р

**package error.** The difference between the actual net contents of an individual package as measured and the declared net contents on the package label; minus (–) for less than the label and plus (+) for more than the label.

**packaged goods.** Product or commodity put up in any manner in advance of sale suitable for either wholesale or retail sale.

**petroleum products.** Gasoline, diesel fuel, kerosene, or any product (whether or not such a product is actually derived from naturally occurring hydro-carbon mixtures known as "petroleum") commonly used in powering, lubricating, or idling engines or other devices, or labeled as fuel to power camping stoves or lights. Sewing machine lubricant, camping fuels, and synthetic motor oil are "petroleum products" for the purposes of this regulation. The following products are not "petroleum products": brake fluid, copier machine dispersant, antifreeze, cleaning solvents, and alcohol.

plus errors. See MINUS OR PLUS ERRORS

**principal display panel or panels.** Part(s) of a label that are designed to be displayed, presented, shown, or examined under normal and customary conditions of display and purchase. Wherever a principal display panel appears more than once on a package, all requirements pertaining to the "principal display panel" shall pertain to all such "principal display panels." See Section 2.7 in the Uniform Packaging and Labeling Regulation in NIST Handbook 130.

**production lot.** The total collection of packages defined by the packager, usually consisting of those packages produced within a given unit of time and coded identically.

**pycnometer (pik·näm´ ət ər).** A container of known volume used to contain material for weighing so that the weight of a known volume may be determined for the material. If it is constructed, it is called a density cup.

### R

**random pack.** The term "random package" shall be construed to mean a package that is one of a lot, shipment, or delivery of packages of the same consumer commodity with varying weights which means, packages of the same consumer commodity with no fixed pattern of weight.

**random sampling.** The process of selecting sample packages such that all packages under consideration have the same probability of being selected. An acceptable method of random selection is to use a table of random numbers.

range. The difference between the largest and the smallest of a set of measured values.

**reasonable variation.** An amount by which individual package net contents are allowed to vary from the labeled net contents. This term is found in most federal and state laws and regulations governing packaged goods. Reasonable variations from the labeled declaration are recognized for (1) unavoidable deviations in good manufacturing practice, and (2) loss or gain of moisture in good distribution practice.

**rounding.** The process of omitting some of the end digits of a numerical value and adjusting the last retained digit so that the resulting number is as near as possible to the original number.

S

**sample.** A group of packages taken from a larger collection of packages and providing information that can be used to make a decision concerning the larger collection of packages or of the package production process. A sample provides a valid basis for decision only when it is a random sample (defined).

**sample correction factor.** The factor as computed is the ratio of the  $95^{th}$  quantile of the student's t-distribution (one-sided) with (n-1) degrees of freedom and the square root of n where n is the sample size.

**sample error limit (SEL).** A statistical value computed by multiplying the sample standard deviation times the sample correction factor from Column 3 of Table 2-1. Category A – Sampling Plans for the appropriate sample size. The SEL value allows for the uncertainty between the average error of the sample and the average error of the inspection lot with an approximately 95 % level of confidence.

sample size (n). The number of packages in a sample.

**sampling plan.** A specific plan that states the number of packages to be checked and the associated decision criteria.

**scale tolerance.** The official value fixing the limit of allowable error for weighing equipment as defined in NIST Handbook 44.

**seat.** (as in "seat diameter" or "seated capacity"). The projection or shoulder near the upper rim of a cup or container that is designed to serve as the support for a lid or cover.

**seated capacity.** The capacity of a cup, container, or bottle, as defined by the volume contained by them when the lid or a flat disc is inserted into the lid groove that is located inside and near the upper rim of the cup, container, or bottle.

SEL. See SAMPLE ERROR LIMIT.

**shipment.** A quantity of identically labeled product (except for lot code) sent at one time to a single location.

**slicker plate.** A flat plate, usually of glass or clear plastic composition, used to determine the "level full" condition of a capacity (volumetric) measure.

**standard deviation.** A measure to describe the scatter of the individual package contents around the mean contents.

**standard pack.** That type of package in which a commodity is put up with identical labels and only in certain specific quantity sizes. Examples of goods so packed are canned, boxed, bottled and bagged foods, and over-the-counter drugs.

**supplementary quantity declarations.** The required quantity declaration may be supplemented by one or more declarations of weight, measure, or count, such declaration appearing other than on a principal display panel. Such supplemental statement of quantity of contents shall not include any terms qualifying a unit of weight, measure, or count that tends to exaggerate the amount of commodity contained in the

package (e.g., "giant" quart, "full" gallon, "when packed," "minimum," or words of similar import). See Section 6.12 in the Uniform Packaging and Labeling Regulation in NIST Handbook 130.

## Т

tare sample. The packages or packaging material used to determine the average tare weight.

tare sample size. The number of packages or packaging material units used to determine the average tare weight.

**tare weight.** The weight of a container, wrapper, or other material that is deducted from the gross weight to obtain the net weight.

**tolerance.** A value fixing the limit of allowed departure from the labeled contents; usually presented as a plus (+) and minus (-) value.

**total quantity MAV.** A calculated value used to determine if any minus Total Quantity Package Error found in a multiunit or variety packages is unreasonable. A Total Quantity MAV is based on the declared quantity and count of the individual inner packages. It is determined by obtaining the applicable MAV for each individual inner package quantity from the appropriate Mav table (refer to Appendix A. "Tables" and then calculating the "Total Quantity MAV" as follows:

- Multiunit Package: Total Quantity MAV = Number of Individual Inner Packages × MAV for Individual Inner Package Quantity
- Variety Package: Total Quantity MAV = The sum of the applicable MAVs for all Individual Inner Packages.

**Note**: A Total Quantity MAV is not used when the MAV applied is based on a percentage of the labeled quantity on a multiunit or variety package

### U

**unit of measure.** An increment of weight, length, or volume so that an inspector may record package errors in terms of small integers. (The package errors are actually the integers multiplied by the unit of measure.)

**unreasonable errors.** Minus package errors that exceed the MAV (defined). The number of unreasonable errors permitted in a sample is specified by the sampling plan.

**unused dry tare.** All unused packaging materials (including glue, labels, ties, etc.) that contain or enclose a product. It includes prizes, gifts, coupons, or decorations that are not part of the product.

**U.S. customary units.** Units based upon the yard, gallon, and the pound commonly used in the United States of America. Some of these units have the same name as similar units in the United Kingdom (British, English, or Imperial units), but they are not necessarily equal to them.

**used dry tare.** Used tare material that has been air dried, or dried in some manner to simulate the unused tare weight. It includes all packaging materials that can be separated from the packaged product, either readily (e.g., by shaking) or by washing, scraping, ambient air drying, or other techniques involving more than "normal" household recovery procedures, but not including laboratory procedures like oven drying.

Labels, wire closures, staples, prizes, decorations, and such are considered tare. It is not the same as "wet tare." See also "wet tare."

#### V

**variety package.** A package intended for retail sale, containing two or more individual packages or units of similar, but not identical, commodities. Commodities that are generically alike, but that differ in weight, measure, volume, or style variation (e.g. color, flavor, scent, etc.) are considered similar, but not identical.

(Added 2022)

volumetric measures. Standard measuring flasks, graduates, cylinders, for use in measuring volumes of liquids.

### W

wet tare. Used packaging materials when no effort is made to reconstruct unused tare weight by drying out the absorbent portion (if any) of the tare.

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