



Australian Government  
National Measurement  
Institute  
Trade Measurement



# GUIDE TO THE SALE OF PRE-PACKAGED GOODS

NOVEMBER 2010

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On 1 July 2010, the new national system of trade measurement commenced under the administration and regulatory oversight of the National Measurement Institute (NMI) a division of the Australian Government's Department of Innovation, Industry, Science and Research.

NMI is Australia's peak measurement organisation, responsible for maintaining the nation's primary standards of measurement and for providing the legal and technical framework for the dissemination of those standards. NMI is the only 'one-stop shop' for all disciplines of measurement in Australia – analytical, biological, chemical, physical and legal. We provide measurement expertise, calibration services, chemical and biological analyses and pattern approval testing.

In Australia an estimated value of \$400 billion of goods based on measurement are traded every year. All of this involves measuring volume, weight, length, area, or the number of goods being bought and sold. An increasing proportion of this trade is in pre-packed articles (known internationally as prepackages).

NMI takes its responsibility for ensuring compliance with the trade measurement regulatory framework seriously. We produce concise and timely communications on business obligations. This guide has been prepared to assist businesses in understanding the requirements of the national trade measurement legislation in relation to pre-packed articles.

A handwritten signature in black ink, consisting of several fluid, overlapping strokes that form a stylized representation of the name.

**Dr Valérie Villière**

General Manager,  
Legal Metrology Branch  
National Measurement Institute



# INTRODUCTION

This guide is aimed at helping manufacturers, packers, importers and sellers of pre-packed articles understand their obligations under the national trade measurement laws, particularly in relation to package labelling and accurate measurement.

Everyone benefits when correct measurement is applied in trade.

Customers benefit by receiving the goods they order and pay for.

Sellers benefit by not giving product away in excess of the stated measurement.

The whole community benefits through customer confidence in a trade measurement system that delivers consistency, reliability and compliance to international standards.

The national trade measurement laws control the measurement of pre-packed articles by quantity. The main laws include:

- the *National Measurement Act 1960* which establishes a national system of units and standards of measurement and provides for the uniform use of those units and standards throughout Australia

- the *National Measurement Regulations 1999* which prescribe the Australian legal units of measurement
- the *National Trade Measurement Regulations 2009* which prescribe pre-packed article regulation.

As well as pre-packed articles, the trade measurement laws administered by the NMI cover:

- the definition of the legal units of measurement
- the use of measuring instruments for trade
- testing and verification of measuring instruments for trade
- transactions by measurement
- licensing of businesses that verify trade measuring instruments (these are known as servicing licensees)
- licensing of public weighbridges.

The guide is for general advice only and is not a substitute for the responsibility of users to consult the national trade measurement laws and to exercise their own skill and care, or seek professional advice, in considering legal obligations for their business.



# YOUR KEY RESPONSIBILITIES

Under the trade measurement laws, manufacturers, packers, importers and sellers of pre-packed articles must:

- make sure packages are correctly labelled – the laws include requirements for measurement marking and packer's identification
- make sure packages they import, pack or sell contain the marked measurement
- have appropriate measuring instruments – any measuring instruments used to perform compliance sampling must be suitable for the task, of an NMI-approved pattern, verified, and properly maintained to ensure they remain accurate at all times
- assist trade measurement inspectors with any enquiries and provide information if required.

## PRE-PACKED ARTICLES WITH COMMON MEASUREMENTS

Under the national trade measurement legislation, manufacturers, packers and importers can choose either of **two methods** for determining the measurement of pre-packed articles with common measurements or 'constant nominal content'.

The first method is the system based on the **Uniform Trade Measurement Legislation (UTML)** adopted by the states and territories before 2010 where:

- the average content in a sample of pre-packed articles of the same kind and measurement can't be less than the stated quantity marked on the packages
- no pre-packed article can have a shortfall greater than 5% of the stated quantity



- the permissible average deficiency in a sample of 12 or more articles is nil (see exceptions below) – an inspector will generally check 12 articles, but can choose a number of packages greater than 12 for this sampling process, depending on the circumstances
- a small number of ‘desiccating’ goods (that is goods, mushrooms and soap, that lose moisture after packing) are allowed a greater permissible maximum deficiency and an average deficiency after the day of packing to reflect this moisture loss. You should check the detail of the trade measurement laws for these desiccating goods and the measurement-marking requirements.
- allowance is made for a small number of articles to exceed a ‘tolerable deficiency’, and
- none of the articles in the sample can have more than twice the prescribed tolerable deficiency.

See our **Guide to the Average Quantity System in Australia** for more information on the AQS.

### PRE-PACKED ARTICLES WITH DIFFERING MEASUREMENTS

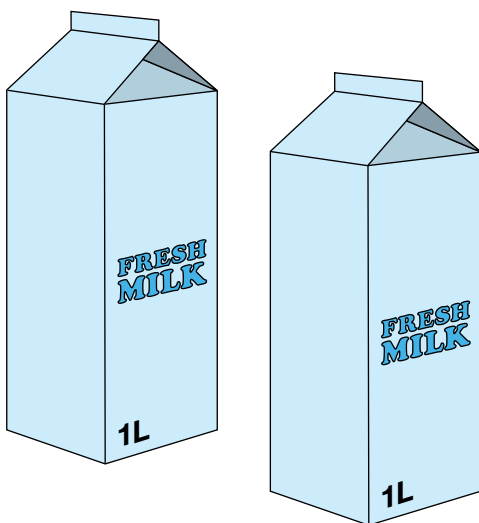
These articles are known as random-weight or catch-weight articles. It is not possible to undertake a sample because there are no articles of the same kind and measurement, and it is not meaningful to calculate an ‘average’ measurement.

The measurement of any such article – whether it is expressed as weight, volume, number, area or length – **must not be less** than the measurement stated on the package label. The legislation does not allow for **any** deficiency in even a single package’s contents.

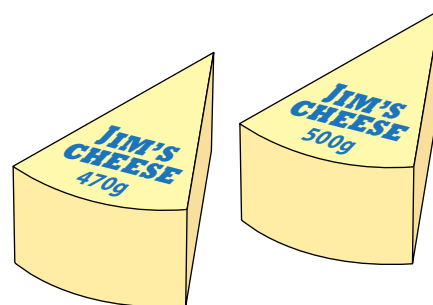
The legislation does **not** allow a deficiency for ‘desiccating’ goods, other than those identified, that might dry out and lose weight. If the article is likely to lose weight over time through evaporation, dehydration or other means, the packer must make allowances for any expected losses in the measurement when packaging the product for the entirety of its shelf life.

The second system for determining the measurement of pre-packed goods with a constant nominal content is the **Average Quantity System (AQS)**. This is an internationally agreed method that was adopted in Australia in July 2010 as part of the new national trade measurement system. Under the AQS, manufacturers, packers and importers must comply with three important rules:

- the average net content in a sample from the production run of pre-packed articles can’t be less than the stated quantity marked on the packages



Same product with a *constant* nominal measurement



Same product with a *differing* nominal measurement



## UNIT PRICE MARKING FOR RETAIL SALE

Many pre-packed goods which are sold by weight, especially foods such as fruit, vegetables, cheese, meat, fish and smallgoods, are sold by unit price, that is price per kilogram.

These pre-packed articles should be marked in the required manner (see section on Labelling page 9) with:

- the weight
- the price per kilogram, and
- the total price for the article.

## WHEN AN INSPECTOR VISITS

The National Measurement Institute employs inspectors throughout Australia. The role of inspectors is to:

- ensure that all measuring instruments used for trade are verified and used correctly
- monitor the verification activities of servicing licensees (see page 12 for more about servicing licensees)
- check pre-packed articles for correct packer identification, measurement markings and accurate measure
- investigate complaints and resolve problems with trade measurement matters
- issue infringement notices or take prosecution action where there have been breaches of the laws.

A visit by an inspector may be a response to a complaint or query from a consumer, or part of a trade measurement compliance inspection program.

Visits by inspectors can occur 'at all reasonable times', and the inspector does not have to give notice of entry. Frequency of visits may be based on a risk assessment by the National Measurement Institute.

Inspectors are available to advise you on site or by telephone. We recommend that you work closely

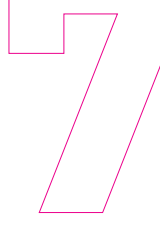


with your NMI Trade Measurement inspectors, who are available to help you and answer your queries.

An inspector has power to:

- enter and search a building, place or vehicle apparently used for business, but not areas used for residence unless in possession of a search warrant or by consent of the occupier
- test packages by examining, measuring or breaking them open
- test and verify measuring instruments
- check that the licensee's verification mark has been properly applied to a measuring instrument and details of verification have been notified to the NMI
- require assistance
- examine a packer's, importer's or seller's records, and to take copies of these records
- issue notices
- seize documents, records, measuring instruments or packages
- ask questions and require answers
- record details of packages, including by filming or photographing.





## WHAT CONSTITUTES AN OFFENCE?

Offences involve packing or selling packages that don't comply with the national trade measurement laws in respect of measurement or labelling.

## HOW THE LAWS ARE ENFORCED

Actions which may be taken include:

- the issuing of an inspection report at the time of the inspection, listing remedial actions to be undertaken by the packer, importer or seller
- a verbal warning
- the issuing of a non-compliance notice
- a formal written warning
- enforceable undertakings
- an infringement notice
- injunction
- prosecution.

## YOU ARE RESPONSIBLE FOR YOUR OPERATIONS AND PROCESSES

As packers, importers or sellers you have a responsibility to ensure your organization's operations have systems in place to achieve compliance with the national trade measurement laws. You need to be able to show that the articles you sell are labelled correctly and the quantities contained in the articles meet the labelling requirements set out on page 10.

You should take responsibility for the accuracy and marking of packages which you import, produce or sell, and make sure that staff, systems and equipment comply with the trade measurement laws.

You should ensure that authority is delegated to competent staff, and there is proper and ongoing training of staff, and appropriate supervision of processes.

## PACKERS

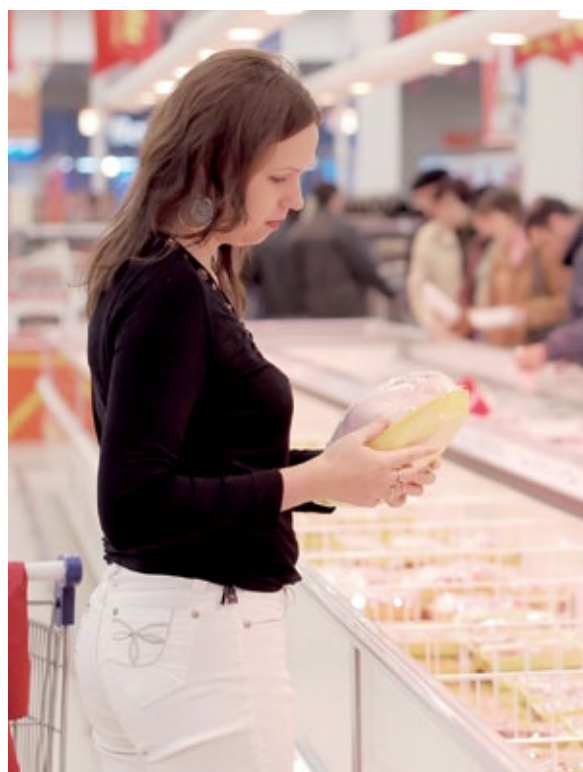
As a packer, you need to make sure that your staff are fully aware of the requirements of the national trade measurement laws and can demonstrate that internal quality control systems are in place.

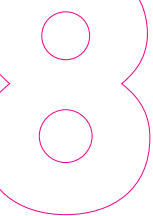
## IMPORTERS

As an importer, you should insist that your suppliers are aware of the requirements of the national trade measurement laws and can demonstrate that they comply with the laws in terms of quality control systems. You should have in place your own quality control system to monitor and verify compliance of imported goods before distribution and sale.

## SELLERS

As a seller, you should insist that your suppliers – both packers and importers – are aware of the requirements of the national trade measurement laws and can demonstrate that they comply with the laws and have in place quality control systems. You should have in place your own quality control system to monitor and verify compliance of the goods you sell.





While the method of checking the measurement of packages and recording the results of your process and compliance sampling is not prescribed by law, the more extensive your checks and records, the more you can prove that you did everything in your power to ensure the correct measurement of the packages.

The extent of these checks depends on each set of circumstances.

You should be able to demonstrate good operational practices in accordance with any appropriate recognised industry code which reflects trade measurement requirements.

Your processes and procedures should include a checking and auditing loop to demonstrate compliance with the trade measurement laws.

You should make sure that researched and documented measurement records, with a history of past performance, are used to determine future fill settings.

You should determine and continually review the process sampling frequency based on a better understanding of your processes and procedures and natural process variabilities. In a high-volume mass production operation, process sampling (to understand your production processes) would generally be a separate action from compliance sampling (to determine compliance with the laws).

For smaller operations it may be practicable to merge these two sampling activities into one function.

Your work instructions and procedures should include documentation such as:

- training records
- supervisory checks
- measuring instrument checks
- remedial actions and revised measurement targets.

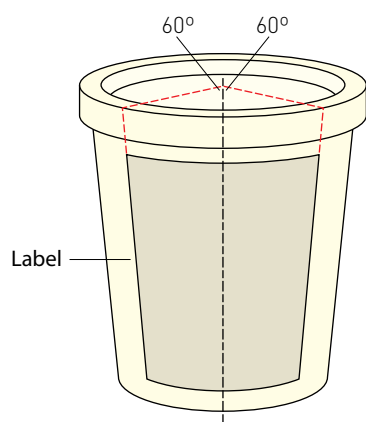
# LABELLING

There are a number of detailed requirements for labelling in the national trade measurement laws to make sure that the buyer is properly informed.

## POSITION, POSITION, POSITION!

The marking that states the measurement of the package (weight, volume, length, area or number) must be on the main display part of the package. It must also be shown on at least one of the other parts of the package that may be likely to be displayed to the buyer. There is an exception from this requirement for bottles or casks of wine.

When the package is substantially cylindrical, spherical, oval or conical, the measurement marking must be wholly contained within a 60-degree arc either side of the line drawn vertically through the centre of the main display panel (see the shaded region of the label shown on the illustration below).



The measurement marking must lie within the shaded area

## SIZE DOES MATTER

The minimum character size of the measurement marking on a package depends on the maximum dimension of the package:

- for **rectangular packages** the maximum dimension is the greater of the height, length or breadth of the package
- for **cylindrical, oval etc packages** the maximum dimension is the greater of the height, length or diameter of the package.

Maximum dimension height of package	Minimum character height of printed numbers/letters
120 mm or less	2.0 mm
over 120 to 230 mm	2.5 mm
over 230 to 360 mm	3.3 mm
over 360 mm	4.8 mm

If the measurement marking is stamped or embossed instead of printed, the character size must be at least three times the minimum printed character size stated above. If you use an NMI-approved printing device for the measurement marking, the characters must be at least 3 mm high.

## NAME AND ADDRESS OF PACKER

For articles packed in Australia, the name and address of the packer (or the person on whose behalf it was packed) must be clearly marked on the package. The address must be a street address within Australia. PO boxes, email addresses or website addresses are not permitted as substitutes for street addresses.

The trade measurement laws do not prescribe the size or location of the name and address of the packer, but the details should be clear and legible.

For imported food (which includes beverages and ingredients), the Food Standards Code requires that the name and business address in Australia of the importer or seller must be clearly marked on the package. The code is a collection of Australian and New Zealand food standards with the force of law (see [www.foodstandards.gov.au](http://www.foodstandards.gov.au)).

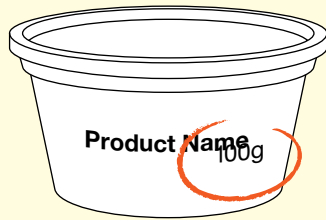
<b>Labelling requirements</b>			
<b>Measurement units that are allowed</b>		<b>Abbreviations allowed</b>	<b>Abbreviations NOT allowed</b>
<b>WEIGHT</b>	kilogram	kg	KG, Kg, kilos
	gram	g (for any mass exceeding 1000 g, use kg)	G, gm, grammes, grm
	milligram	mg	MG, Mg, Mgram
<b>VOLUME</b>			
<b>Liquids</b>	litre	L (l is permitted, but is better to avoid)	
	decilitre	dL	DI
	centilitre	cL	CI
	millilitre	mL (for any volume exceeding 1000 mL, use L)	ML
<b>Solids/Liquids</b>	cubic metre	m <sup>3</sup>	
	cubic centimetre	cm <sup>3</sup> (for any solid exceeding 1000 cm <sup>3</sup> use m <sup>3</sup> )	
<b>Linear</b>	metre	m	
	centimetre	cm (if length does not exceed 100 cm)	
	millimetre	mm (if length does not exceed 1000 mm)	
<p>'Millimetre' is also allowable for paper lengths up to 10,000 mm, building material in sheet form and coated abrasive belts. Millimetre is also allowed in expressing the linear measurement of an article if its use was customary before the regulations commenced.</p> <p>Fractions of units must be shown as decimals, and the decimal must be preceded by zero, or another numeral. For example, 1/4 kg must be shown as either 0.25 kg or 250 g.</p> <p>The degree of accuracy of measurement marking should not exceed three significant figures, unless the measurement marking is made by a printing device with an NMI approval which allows for greater precision. For example, 7.632 would not be allowed. The correct measurement marking would be 7.63.</p>			

### Common labelling mistakes

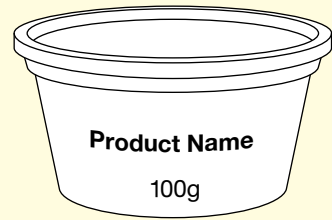
**X** Incorrect

**✓** Correct

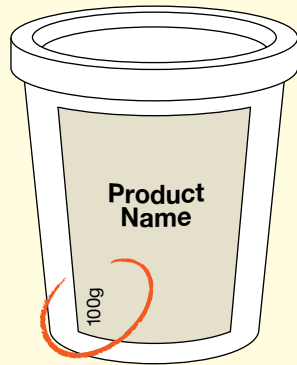
The product name is overlapping the measurement marking



The measurement marking is clear to read, 2 mm from the edge of the package, with a clearance of 2 mm in all directions from other graphic material or text



The measurement marking should be printed in the same direction as the brand name



The measurement marking is clear to read and in the same direction as the brand name



An additional strip (such as promotional competition items) should not hide the measurement marking



The measurement marking and product name needs to be clear to read when any additional strip is added to the package





# 12

## MEASURING INSTRUMENTS AND EQUIPMENT

The national trade measurement laws are in place to ensure delivery of correct measurement. These laws include the following major elements relating to measuring instruments.

### PATTERN APPROVAL

This is the process whereby the National Measurement Institute (NMI) or an NMI appointee examines the pattern design of an instrument prototype against a set of national or international metrological specifications. This determines whether an instrument is capable of retaining its calibration over a range of environmental and operating conditions, and ensures that the instrument is not capable of facilitating fraud.

Pattern approval protects measuring instrument manufacturers and importers from substandard measuring instruments that would otherwise provide unfair competition. It also means that when a measuring instrument is bought there can be confidence that the instrument will meet certain metrological standards of performance over a range of operating conditions, and that the instrument will not need to be excessively recalibrated.

A certificate of approval will be issued by the NMI for the makes and models of measuring instruments that have been approved for trade. The approval number must be fixed to the measuring instrument.

Verification is the process where instruments are:

- inspected to ensure they comply with the approved pattern
- tested using national instrument test procedures to ensure they are operating within the maximum permissible errors
- marked to indicate their compliance with the national trade measurement laws.

Verification, and subsequent verifications, are performed by servicing licensees and NMI trade measurement inspectors.

### SERVICING LICENSEES

Servicing licensees are businesses which have been licensed by the National Measurement Institute to verify measuring instruments for trade use. They are authorised to carry out this work on one or more types of measuring instruments, such as flowmeters and weighing instruments.

Servicing licensees must place an identifying mark on instruments that they verify, identifying the date of verification, the licensee, and the technician who performed the verification. They must also notify the National Measurement Institute of each verification that they have carried out.



## ACCURACY OF MEASURING INSTRUMENTS

To ensure accuracy, the measuring instrument must be:

- NMI pattern approved
- verified by a servicing licensee or an inspector and bear a licensee's or inspector's mark.

The onus is on the operator of the measuring instrument to ensure its accuracy.

Common mistakes with measuring instrument accuracy include:

- the instrument scale intervals are too large
- the instrument is not regularly tested and verified by a servicing licensee authorised and competent to carry out the work in accordance with national instrument test procedures
- the instrument is not checked over its appropriate range
- the instrument is not suited to the goods being packed or the relevant packing environment
- misuse of the instrument
- the accuracy of the measuring instrument is not regularly monitored by the owner/operator.

## ACCURACY CLASSES OF WEIGHING INSTRUMENTS

The pattern approval will indicate the accuracy class for the measuring instrument, and this accuracy class will be included on the measuring instrument dataplate. There are four accuracy classes:

- I Mandatory for precious stones, and recommended for some pharmaceuticals
- II Mandatory for precious metals, and used for general pharmaceuticals. Would also be recommended for packing high-value and small-denomination articles such as herbs, spices or coffee

III Used for general weighing, shop scales etc

IIII Used in a few specific low-cost industrial applications such as scales to weigh airport luggage, earth, sand, gravel, garbage or timber in log form.

### Examples of dataplate information on measuring instruments

Manufacturer's mark, or name written in full	Smiths Pty Ltd
Importer's name or mark	Scales Pty Ltd
Indication of accuracy class	III
Maximum capacity	Max ..... / ..... kg
Minimum capacity	Min ..... / ..... kg
Verification scale interval	e = ..... / ..... kg
Tare capacity	T = ..... kg
Special temperature limits	- 5°C to +40°C
Special number of the instrument	.....
Pattern approval mark for the instrument	NMI No 6/4C/999

## MAINTENANCE, CALIBRATION AND VERIFICATION

Your maintenance contract with a servicing licensee should note that the work is being performed by a person who is competent to verify that particular measuring instrument.

Be aware of the important legal difference between a calibration and a verification. The latter is performed by a servicing licensee in accordance with the national trade measurement laws. Verification confirms that the measuring instrument is providing an accurate measurement and is in good working order. It must be carried out by a servicing licensee or an NMI inspector in accordance with national instrument test procedures and the certificate of approval for that instrument.

Servicing licensees are expected to operate their verification activities in accordance with the Trade Measurement Licensees' Accreditation Scheme (TMLAS), or some other form of quality assurance system.

Recommended maximum scale intervals		
weight range of the package	recommended maximum scale interval	accuracy class applicable
less than 50 g	0.1 g	Class II
50 – 100 g	0.2 g	Class II
100 – 250 g	0.5 g	Class II
250 – 500 g	1 g	Class III
500 g – 1 kg	2 g	Class III
1 – 2.5 kg	5 g	Class III
2.5 – 5 kg	10 g	Class III
5 – 10 kg	20 g	Class III

## VERIFICATION MARKS

The trade measurement laws create a unique system of servicing licensee's marks and marking requirements that will ensure easy identification of verification marks on measuring instruments across Australia.

The code identification comprises the servicing licensee's unique code (three letters in upper case) and the verifier's registration number, both of which are allocated by the NMI.

The month the verification was performed is shown by an upper case letter. 'A' represents January, 'B' February through to 'L' representing December.

The year the verification was performed is shown by a numeral with '0' representing the first year of a decade (eg 2010) through to '9' representing the last year of the decade (2019).

INSTRUMENT VERIFIED UNDER THE NATIONAL MEASUREMENT ACT 1960		
WQS 3	F	0
<i>Code identification for licensed verifier</i>	<i>Month code</i>	<i>Year code</i>

*Example of a label with a verification mark*

## MAINTENANCE, CALIBRATION AND VERIFICATION TESTING REGIME

**Test 1** is envisaged as a **daily check** to be carried out by the owner/operator of the measuring instrument to determine if there are any gross errors in the instrument. Whilst this test would not be carried out by someone with the skills of a servicing licensee, you should try and make sure that the test procedures are adequate and results properly documented. Test weights should be at least equal to the typical package weight, and be of an accuracy appropriate to the class of scale. If there appears to be a problem with the accuracy or serviceability of the instrument, it is important that you take action to fix it.

**Test 2** is an **in-service inspection** carried out by an NMI inspector, and is generally referred to as a calibration check. Generally, this level of inspection would not be to the same standard as nominated in the national instrument test procedures.

**Test 3** is a **full verification test** to be performed by a servicing licensee or an NMI inspector in accordance with all the requirements of the national instrument test procedures and certificate of approval for the particular measuring instrument. It is strongly recommended that verification be carried out regularly. You may need to increase the frequency in a harsh operational environment, to maintain the instrument's accuracy.

## WHAT IF IT GOES WRONG?

Sometimes your compliance sampling might indicate that you have packages with a shortfall. In other words the measurement of the package is less than it should be as stated on the label.

You will need to take remedial action if you have identified that:

- a single package deficiency exceeds the permissible tolerance and/or
- the average (or the weighted average in the context of AQS) of measurements of sample packages is less than the nominal measurement marking.

In either case you will need to:

- identify the faulty packages
- remove them from your distribution channel, and place them in quarantine
- clearly mark the packages to prevent their inadvertent release
- report the details to senior management
- implement appropriate preventative measures.

Note that, even if you were to sell any non-compliant packages (at, say, a substantial discount, or even give them away), you do not avoid your responsibility to comply with the trade measurement laws.

### IDENTIFYING CAUSES AND REMEDIAL ACTIONS

You should review your processes and procedures, including the efficiency and accuracy of your process sampling.

Make sure that you identify and adjust any faulty equipment or process. If this is not possible, tag out equipment identified as faulty.

You could also consider operator retraining or closer supervision if that seems appropriate.

### SORTING QUARANTINED PACKAGES

Identify those individual packages which are excessively deficient, and remove them. You should also consider removing packages with permissible deficiencies in order to improve your sample average to equal or exceed the nominal marked measurement.

Re-check a sample of this revised batch of packages to ensure that it now complies with the marked measurement.

### RE-LABELLING

Re-labelling to a lesser marked measurement must be consistent with the trade measurement laws.

However, before re-labelling you should consider whether this may cause marketing problems. We recommend that you discuss this with your retailer. Buyers may expect a constant nominal quantity for particular-sized containers, even though the laws may not require it.

A person who re-labels a package with a revised measurement marking is responsible for the accuracy of that measurement marking. The action of re-labelling with a revised measurement marking may also require the person to identify themselves as the packer. Hence, they would have to include their name and address on the package.

### REPACKING OR TOPPING UP

Identify those individual packages which have failed due to excessive deficiency, and repack or top them up.

You should apply the same procedure to packages with permissible deficiencies which are causing a failure of the average, in sufficient numbers to bring about a sample average that equals or exceeds the nominal marked measurement.

Re-check a sample of this revised batch of packages to ensure that it now complies with the marked measurement.

Consider other remedial actions if the above procedures are uneconomic or impractical.

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## GLOSSARY

**Average Quantity System (AQS)** – an internationally recognised system for sampling and testing groups of packages to determine whether, on average, they contain the quantities with which they are marked.

**Certificate of approval** – means a certificate issued by the Chief Metrologist including certificates of approval of a pattern issued to attest that the design (the pattern) of a new instrument is suitable for use in trade and general certificates issued to cover simple instruments such as a simple measure of length that are capable of being manufactured to a common standard.

**Dataplate** – is a plate or label on an instrument that bears the mandatory descriptive markings of, for example, manufacturer identification, model number, serial number, year of manufacture and pattern approval sign.

**Measuring instrument** – means:

- a) a thing by means of which a measurement of a physical quantity may be made, or
- b) a component of such a thing.

**National Instrument Test Procedures** – are procedures for testing measuring instruments determined by the Chief Metrologist under subsection 18GG (2) of the *National Measurement Act 1960*.

**Nominal quantity** – means the quantity of the product in a prepackage that is declared on the label by the packer.

**Non-compliance notice** – is notification that identifies a measuring instrument, package or trading practice as not complying with statutory requirements for verification and which prohibits its use for applications requiring mandatory verification.

**NMI inspector** – is a trade measurement inspector employed by NMI and appointed under the *National Measurement Act 1960* by the Secretary of the Department of Industry, Innovation, Science and Research. An NMI inspector has the power:

- to enter business or to inspect business vehicles
- to search and seize things, copy documents, record information and test articles and instruments
- to enter residential premises provided the inspector has consent or a warrant
- to collect evidential material including to take photographs, make video or audio recordings or make sketches
- to sample and test measuring instruments in accordance with the purposes of the *National Measurement Act 1960*.

**Pattern approval** – is a decision under Regulation 60 of the National Measurement Regulations 1999, based on an evaluation process, that the design of a measuring instrument complies with the relevant statutory requirements and is suitable for use in trade or other legal purposes and is regulated in such a way that it is expected to provide reliable measurement results over a defined period of time.

**Prepackage or pre-packed article** – means a single item:

- a) that consists of a product and the packing material into which it was put before being offered for sale, and
- b) that is prepared for presentation to a consumer:
  - i. as a single item, whether the packing material encloses the product completely or partially, and
  - ii. in a way in which the quantity of the product cannot be altered without opening or perceptibly modifying the packing material, and
- c) in relation to which the quantity of the product has a predetermined value.



**Principal display panel** – in relation to a package, means the part of the package that is most likely to be displayed under normal and customary conditions of display.

**Servicing licensee** – means a person to whom a licence is granted under section 18 NB of the *National Measurement Act 1960*.

**Random-weight or catch-weight articles** – are the same article packed in measurements which are not constant i.e. the measurement varies between packs. A constant measurement pack may be 500 g of cereal or 1 litre of milk. An example of a random-weight is a number of packs of cut cheese in a range of sizes marked with weights which reflect this variation, for example, packs ranging from lightest 115 g to heaviest 145 g.

**Shortfall** – is the extent to which the net contents of a prepackage article falls short of the stated nominal quantity.

**Tare weight** – is the weight of empty packaging.

**Tolerable deficiency or tolerable negative error** – means the deficiency in a quantity of product permitted in a prepackage.

**Uniform Trade Measurement Legislation (UTML)** – is the trade measurement legislative framework that all the states and territories adopted and that forms the basis of the National Trade Measurement Regulations 2009.

**Unit price** – is the price of a good per standard unit of measurement (such as price per kilogram).

**Verification** – is a process of ensuring that measuring instruments operate accurately.

A measuring instrument is verified if:

- a) either:
  - i. a verifier is satisfied that the measuring instrument complies with the requirements for verification set out in section 18GK when tested in accordance with the national instrument test procedures and the measuring instrument is marked with a verification mark;  
or
  - ii. if the measuring instrument is treated as one of a batch under the national instrument test procedures – a verifier is satisfied that the measuring instruments of that batch comply with the requirements for verification set out in section 18GK when tested in accordance with those procedures and the measuring instrument is marked with a verification mark; and
- b) if the instrument is of a class for which a re-verification period is prescribed – the period since it was last verified or re-verified does not exceed the re-verification period.

# 18 MORE INFORMATION

The main laws covering trade measurement in Australia are the *National Measurement Act 1960* and the National Trade Measurement Regulations 2009. You can access this legislation at

**[www.comlaw.gov.au](http://www.comlaw.gov.au)** or refer to the NMI website **[www.measurement.gov.au](http://www.measurement.gov.au)**.

The International Organisation of Legal Metrology (OIML) has published two recommendations that are relevant to packaging:

- OIML R79 specifies the requirements for labelling of packages, and
- OIML R87 specifies the requirements for filling packages using AQS.



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NMI has a presence in every state and territory in Australia. It is organised into five branches: chemical and biological metrology, physical metrology, analytical services, legal metrology and business services.

National Measurement Institute  
Bradfield Road,  
Lindfield, NSW 2070  
PO Box 264, Lindfield, NSW 2070

Tel: 1300 686 664

Fax: (02) 8467 3715

[infotm@measurement.gov.au](mailto:infotm@measurement.gov.au)

[www.measurement.gov.au](http://www.measurement.gov.au)



