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Draft Jamaican Standard

Specification

for

Coffee

BUREAU OF STANDARDS JAMAICA

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Jamaican Standards establish requirements in relation to commodities, processes and practices, but do not purport to include all the necessary provisions of a contract.

The attention of those using this standard specification is called to the necessity of complying with any relevant legislation.

Amendments

No.	Date of Issue	Remarks	Entered by and date

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Foreword

This standard is a revision of and supersedes JS 61: 2016 Jamaican Standard Specification for Coffee.

Coffee is one of Jamaica's flagship products for economic development. The trade requires strict regulation and transparency to ensure that consumers are guaranteed a consistent quality product. This standard seeks to satisfy the consumers' need and protect the Jamaica Coffee Brand.

This standard is compulsory.

Committee representation

The revision of this standard for the Standards Council, established by the Standards Act 1968, was carried out under the supervision of the Bureau's Coffee Technical Committee which at the time comprised the following members:

Acknowledgement

Acknowledgement is made to the following institutions for permission to reproduce material from the related documents outlined below:

International Organization for Standardization (ISO)

National Resources Conservation Authority

The Specialty Coffee Association of America

Related documents

This standard makes reference to the following:

Agtron SCAA 2010	Roast colour classification
ISO 3509	Coffee and coffee products - Vocabulary
ISO 4149	Green coffee - Olfactory and visual examination and determination of foreign matter and defects
ISO 6667	Green coffee-Determination of proportion of insect-damaged beans
ISO 8455	Green coffee - Guidelines for storage and transportation
ISO 24114	Instant coffee - Criteria for authenticity
JS 61	Jamaican Standard Specification for Coffee
JS 36	Jamaican Standard Specification for Processed Food (General)
JS 350	Jamaican Standard Specification for Labelling of commodities Labelling of pre-packaged goods
JS CRS 5	Jamaican Standard Specification for Labelling of pre-packaged foods
Mexican Norm	Cleanliness test method (insoluble sediments) in Coffee
NRCA	Natural Resources Conservation Authority Act
NRCA	Natural Resources Conservation Wastewater and Sludge Regulations, 2013
US Department of Commerce	Recommended Coffee Grinds
JACRA	Jamaica Agricultural Commodities Regulatory Authority Soluble Coffee Standard

Jamaican Standard Specification for Coffee

1 Scope

This standard prescribes the requirements for local and imported "coffee" as defined below. Coffee is the fruits, products and by-products of (coffea spp.).

2 Terms and definitions

For the purpose of this standard, the following terms and definitions shall apply:

2.1
coffee (coffea spp)
beans whole or broken whether parchment, green or roasted and includes ground, decaffeinated, liquid and soluble.

2.1.1
cherry coffee
the mature and ripe fruit (berry) of the coffee tree which is mostly red in colour when fully ripe. Cherry coffee with more than 2% to 3% green berries is unacceptable.

2.1.1.1 Cherry coffee with more than 5% stale berries is also unacceptable.

2.1.1.2 Cherry coffee should go through a floating test and the floaters removed before it is presented for sale.

2.1.2
wet parchment
coffee seeds remaining after the cherry coffee is pulped and washed to remove the exocarp (outer skin) and mesocarp (mucilage). The moisture content of the seed is usually over 60%.

2.1.3
dry parchment
dried endocarp (inner skin) of the coffee fruit.

2.1.4
green coffee
the name applied to raw dry coffee beans, free of all coverings, i.e. cherry, parchment and silver skin.

2.1.5
roasted coffee
properly processed green coffee beans which by application of heat (roasting) have developed a characteristic flavour and aroma.

2.1.6
freshly roasted coffee
coffee that has been roasted within a period of not more than 30 hours before consumption.

2.1.7
roasted and ground
the roasted beans which have been crushed to the desired grind (see Appendix A).

2.2
instant coffee, soluble coffee, coffee extract
product obtained exclusively from roasted coffee by physical methods using water as the only carrying agent that is not derived from coffee.

2.2.1
spray-dried instant coffee
instant coffee obtained by a process in which the coffee extract in the liquid state is sprayed into a hot atmosphere to form dried particles by evaporation of the water.

2.2.2
freeze dried instant coffee
instant coffee obtained by a process in which the product in the liquid state is frozen and the ice is removed by sublimation.

2.2.3
agglomerated instant coffee
instant coffee obtained by a process in which the spray-dried particles of instant coffee are fused together to form larger particles.

2.2.4
soluble coffee mixture
mixture prepared by the co-extraction or the separate extraction of roasted coffee beans and of materials other than coffee beans.

NOTE The composition of soluble coffee mixtures shall be clearly declared on the label. This category of products shall comply with international or local regulations.

2.3
flavoured coffee
coffee to which additives are intentionally introduced to give a different taste.

EXAMPLE Hazel Nut and French Vanilla, etc.

2.4
blended coffee
coffee with a minimum of 30% by weight of exportable grade Jamaican Coffee of the coffee by which the blend is named High Mountain or Blue Mountain. The other portion of the blend should be of acceptable cup quality with no taste faults or taste defects and should possess mild characteristics which will not overpower or detract from the taste of the Jamaican Coffees.

3 Coffee – Green

3.1 General requirements

Green coffee beans shall be free from signs of insect infestation and rodent contamination as determined according to ISO 4149 and ISO 6667. Green coffee beans shall have a moisture content of 10% to 12.5%.

3.1.1 Packaging

Green coffee shall be packed in suitable containers, which conform to local standards for packages, as stipulated by the relevant authorities. Such packaging must maintain the quality characteristics of the product for the period indicated on the package.

3.1.2 Storage

Coffee shall be stored well away from the walls, separated by a distance which allows inspection and sanitary maintenance of the floor between coffee and walls. The recommended distance between stored coffee and walls shall not be less than 0.5m. Coffee shall be stored on pallets that are at least 0.15m in height. Avoid storing near openings such as windows and doors. The storage area shall be free from insects, rodents, foreign odours and any other contaminants.

3.1.2.1 Ambient conditions

A temperature of 24 °C - 29 °C and relative humidity of not more than 55% - 65% are recommended.

3.1.2.2 Lighting

Coffee shall be stored in minimal lighting. Adequate artificial lighting shall be available as required.

3.1.2.3 Labelling

Coffee shall be labelled according to source, type, grade, date and any other information necessary for identification and traceability as outlined in section 4.4.

3.2 Imported green coffee quality standard

3.2.1 General requirements

Imported coffee shall meet the minimum quality standards stipulated by the competent authority.

4 Roasted coffee - Whole beans and ground

4.1 General requirements

4.1.1 All roasted coffee shall be prepared only from coffee beans which are properly cleaned to remove covering membranes and foreign matter and shall be free from any insect infestation and all evidence of spoilage. Coffee for roasting must exhibit the physical and organoleptic characteristics specific to its classification.

4.1.2 The product shall be free from off flavours. Roasted whole beans shall be free of defective beans and contain no more than 5% broken, split or chipped beans.

4.1.3 The equipment used for processing, for example, grinders and roasters, shall be clean and free from objectionable odours.

4.1.4 Roasting operations must be in compliance with the requirements of all relevant regulatory authorities.

4.1.5 The coffee spent ground shall not be offered for sale as coffee.

4.1.6 In addition to the above, the product shall be processed in accordance with the requirements of JS 36 Jamaican Standard Specification for Processed Food (General) and the Processed Food Act 1959.

4.1.7 Traceability of goods, both raw and processed, shall be built into the production and distribution processes.

4.2 Classification

Roasted and ground coffee shall be of the following types based on particle size (see Annex A).

a) Type 1 - Coarse

b) Type 2 - Drip (Medium)

c) Type 3 – Fine

NOTE Coarser or finer grinds are permitted based on the preference.

4.3 Packaging and preparation for delivery

4.3.1 General requirements

Roasted coffee shall be packed in suitable containers, which conform to local standards for packages. Such packaging must maintain the quality characteristics of the product for the period indicated on the package. (See Annex B, B.1)

4.3.2 Vacuum packed

All containers with coffee described as “vacuum packed” shall give a minimum reading of 685.8 mm of mercury or 13.26 psi when tested with a standard puncture type vacuum gauge within one minute after packaging.

4.3.3 Nitrogen flushing

Coffee may also be packed under inert gas.

4.4 Labelling

The product shall be labelled in accordance with JS 350, JS CRS 5 and the legal requirements of the competent authority.

Labels shall indicate:

a) Statement of identity (name of the food)

b) Manufacturer / Brand holder address

c) Manufacture date

d) Batch / Lot number

e) Best before / Expiration date

f) Proper affixation of trademarks, as appropriate

g) Storage and brewing instructions

h) Nutritional facts

i) Ingredients

NOTE Single ingredient foods shall be exempt from the declaration of an ingredients list or nutritional facts panel. Instructions for use, including reconstitution where applicable, shall be included on the label as necessary to ensure correct utilization of food.

5 Detailed requirements

5.0 Sieve analysis

The ground coffee shall meet the below screening requirements. Coarser or finer grinds are permitted as approved by the relevant regulatory authorities.

Table 1 - Recommended coffee grinds

GRIND DESIGNATION	AMOUNT OF COFFEE RETAINED ON SCREEN		AMOUNT OF COFFEE PASSING THROUGH SCREEN	TOLERANCES PASSING TROUGH	
	10 & 14	20 & 28	28	Not Less	Not More
Regular	33%	55%	12%	9%	15%
Drip	7%	73%	20%	16%	24%
Fine	0%	70%	30%	25%	40%

5.1 Cup quality

The beverage shall have the characteristic colour, flavour and aroma of coffee. Cup quality shall meet the minimum cup characteristics as approved by the relevant authorities.

5.2 Roast colour classification

The roast should not be lighter than 75 or darker than 45 on the Agtron scale.

6 Coffee - Instant

6.1 Classification

6.1.1 Type I - Regular

6.1.2 Type II - Decaffeinated

6.2 General requirements

6.2.1 The product shall be made from a brew of good, sound, properly roasted ground coffee beans and shall be free from objectionable odour and flavour.

6.2.2 The product shall be free from impurities. All utensils and extracting, drying and filling equipment shall be clean and free from objectionable odour or flavour. The product shall be maintained in a clean and sanitary condition.

6.2.3 The coffee extract shall be dried with the least practicable delay.

6.3 Detailed requirements

6.3.1 The moisture content on opening shall not be more than 4.5%.

6.3.2 Determination of instant coffee

Caffeine shall be determined using the High Performance Liquid Chromatography method.

6.3.2.1 Type I. Caffeine content calculated as anhydrous caffeine shall not be less than 2.3% on a dry solids basis. No added caffeine shall be present.

6.3.2.2 Type II. The caffeine content calculated as anhydrous caffeine shall not be more than 0.3% on a dry solids basis.

6.3.2.3 Sediments. Refer to Annex D.

6.3.2.4 Cup Quality. The beverage, which is prepared from instant coffee with the directions of the manufacturer, shall have the characteristic colour, flavour and aroma of instant coffee.

6.4 Packaging

The powder shall be packed in an airtight container to prevent caking.

7 Analytical procedures

7.1 Screening analysis of green coffee beans

7.1.1 Procedure. Assemble a set of sieves in order of decreasing size with the largest mesh at the top and a pan at the bottom. Weigh a representative 100g sample of the coffee and place it in the top sieve.

7.1.2 Place the set of sieves with the cover on, onto a shaking machine that operates with a simple eccentric motion at 300 r.p.m. with a tapping motion of 150 strokes per minute and vibrate for five minutes.

7.1.3 Weigh the coffee retained by each sieve, as well as what was caught in the pan. The weight of the coffee on the No.s 17, 16, 15, 10 screens and in the pan should be reported as percentages.

7.2 Determination of green bean moisture content

7.2.1 Dry 2-3 grams of sample in a dried flat weighing dish at 70°C (158°F) under pressure of 50mm Hg for 6 hours; cool in desiccators and weigh.

7.2.2 (Lab Method). Oven should be held with current of dry air during drying to ensure removal of water vapours. It is necessary to work rapidly to avoid unnecessary exposure to air as coffee is very hydroscopic.

NOTE For routine moisture use an acceptable commercial moisture analyzer that can be calibrated. For moisture specification.

7.3 Determination of residual oxygen for packaged roasted coffee

7.3.1 Samples of gas may be obtained by affixing the gas analysis apparatus by means of a self-sealing puncturing tube applied to the centres of the flat ends of cans and other packaging materials. For vacuum packed cans, the cans are placed in the apparatus and pierced.

7.3.2 Oxygen free nitrogen is driven into the system from a cylinder through a reducing valve and a three way stop cock in the sampling line until the pressure in the can is 10-20 cm above atmospheric pressure.

7.3.3 After 1 hour, for the completion of diffusion, samples are withdrawn. For gas pressure packed cans, the cans are punctured and the pressure in the can is determined to the nearest 10 mm of mercury, using a manometer attached to a three-way stop cock in the sampling line.

7.3.4 After the above steps are completed, 100 ml of the contained gas (at atmospheric pressure) is withdrawn into the burette of the standard Orsat gas analysis apparatus and oxygen content is determined by the standard method, using alkaline pyrogallol, after elimination of carbon dioxide from the sample.

7.3.5 The amount of oxygen in the can is calculated based on the oxygen content in the sample.. The recommended residual oxygen for packaged roasted coffee should be 2-3%.

Annex A
(Normative)

Table A.1 — Colour band

Unroasted			
	22 °C (72 °F) Green Beans Green coffee beans as they arrive at the dock. They can be stored for up to 18 months in a climate-controlled environment.		165 °C (329 °F) Drying Phase During the drying phase the beans are undergoing an endothermic process until their moisture content is evaporated, signifying first crack.
Light roast			
	196 °C (385 °F) Cinnamon Roast A very light roast level, immediately at first crack. Sweetness is underdeveloped, with prominent toasted grain, grassy flavours, and sharp acidity prominent.		205 °C (401 °F) New England Roast Moderate light brown, but still mottled in appearance. A preferred roast for many specialty roasters, highlights origin characteristics as well as complex acidity.
Medium roast			
	210 °C (410 °F) American Roast Medium light brown, developed during first crack. Acidity is slightly muted, but origin character is still preserved.		219 °C (426 °F) City Roast Medium brown, common for most specialty coffee. Good for tasting the varietal character of a bean, although roast character is noticeable.
Dark roast			
	225 °C (437 °F) Full City Roast Medium dark brown with occasional oil sheen, roast character is prominent. At the beginning of second crack.		230 °C (446 °F) Vienna Roast Moderate dark brown with light surface oil, more bittersweet, caramel flavour, acidity muted. In the middle of second crack. Any origin characteristics have become eclipsed by roast at this level.
	240 °C (464 °F) French Roast Dark brown, shiny with oil, burnt undertones, acidity diminished. At the end of second crack. Roast character is dominant; none of the inherent aroma or flavours of the coffee remain.		245 °C (473 °F) Italian Roast Very dark brown and shiny, burnt tones become more distinct, acidity almost gone, thin body.

Annex B
(Normative)

Quality control procedures in processing and handling coffee

B.1 Selection, pulping and washing coffee

a) Cherry coffee is bought using a field box that measures 0.0425 mm^3. Refer to Figure B.1 at the end of the Annex.

b) Cherry coffee selected must be in a good condition, devoid of stale, dried, immature or green berries and other extraneous matters.

c) Cherry coffee should be pulpable when pressed between fingers; no more than 2% green or unripe fruit should be in cherry coffee delivered to the pulpery or depot.

d) One of the following applies:

i) Stale coffee (brown coloured cherry coffee) with foul smell and discoloured (brown coloured) seeds are not acceptable and should be rejected.

ii) Cherry coffee must not be stored in metal or plastic containers, plastic sheeting, fertilizer bags or closed containers because such storage will hasten fermentation of the coffee.

e) If cherry coffee was stored under water and it is still fresh smelling and the pulped seeds are clean, it is acceptable.

NOTE This coffee should be pulped within 4 hours after removal from water. The coffee should be randomly sampled by an inspector/selector.

f) Cherry coffee may be stored on a cured concrete barbecue under shade or in a well-ventilated building with concrete or wooden floor.

g) Coffee should be floated on the farms. Test floating should be done at depots or the pulpery to ascertain compliance.

h) Test floating - A random sample should be drawn from the set of bags or boxes of cherry coffee delivered, i.e. a sample should be taken from as many bags chosen at random. If coffee is on a motor truck, samples should be drawn from different areas of the load and from different levels.

i) Coffee should be pulped within 24 hours after reaping if the best results are to be obtained. Floats from the cherry coffee should be processed separately.

j) Adequate water – For every box / 457.2 mm of cherry coffee, 189.3 L of water should be available at the pulpery for pulping and washing each box of cherry coffee.

k) Machines should be adjusted to completely remove mucilage without causing any damage to the beans. The finger test should be done to determine if the coffee is properly washed. Properly washed coffee should not have a slippery feel and should exhibit some resistance when pressed between the fingers.

l) All pulpery equipment and tanks should be kept very clean to prevent contamination of the coffee.

m) According to The Natural Resource Conservation (Wastewater and Sludge) Regulations, 2013, a proper waste treatment facility should be put in place to:

i) Separate the solid waste from the liquid waste.

ii) Screen effluent.

iii) Allow for the settling of suspended solids in the effluent.

iv) Anaerobically or aerobically treat effluent before final discharge.

B.2 Drying and storage of parchment coffee

a) Drying should commence immediately after the pulping and washing processes.

b) The coffee beans in the parchment form should be dried within the range (10%-12.5%). Coffee with higher moisture content is under-cured. The beans are usually soft and may therefore become flattened during the hulling process. The beans may become mouldy and/or musty in storage. If coffee is over-cured, that is below 10% moisture content; the beans become very brittle and may be broken in the hulling process.

c) When parchment coffee has reached an advanced stage of drying, it should never be re-wetted.

d) Parchment coffee should be allowed to dry evenly. It should be raked intermittently during sun drying. The rotary dryers can also be used to get good results.

e) Coffee to be sun-dried should be placed on a clean barbecue (concrete terrace) that is free from stones and other extraneous matter.

f) A crude means of testing the moisture content of the beans is by biting, but this should be followed by an accurate moisture test using a moisture meter. Over-cured beans will crack when pressure is applied during biting. Under-cured beans tend to flatten because of its rubbery nature. Properly cured beans will snap evenly when bitten.

g) Dried parchment should be stored in a dry, ventilated area that is free from odours or other contaminants.

h) Dried parchment may be stored in bags that are placed on pallets or in wooden lined silos.

i) Parchment should rest for at least six weeks before it is hulled. This allows for the elimination of a grassy taste in the cup.

B.3 Hulling and grading

a) The weights on the huller/polisher machine should be adjusted to ensure proper hulling and polishing of beans. Over-polishing causes rapid paling of beans.

b) Inline magnets should be installed to remove any metallic objects in the parchment line that might be present in the product.

c) Graders should be cleaned regularly, and sizer brushes and screens should be checked

regularly for signs of wear. Proper grading and sizing can only be achieved with clean graders, sound screens and brushes.

d) Coffee beans should not be exposed to excess light; they usually pale rapidly with extended exposure to light.

e) Coffee beans should only be stored in clean bags or barrels.

f) Maximum of 5% undersized beans is allowable in any grade of coffee except for pea berry beans where a maximum of 10% undersized beans are allowed.

B.4 Electronic and hand sorting

a) Sorting machines should be adjusted to remove discoloured beans.

b) The machines work best in an ambient temperature of about 22 - 25 degrees Celsius and in an area where there is limited dust which may cover the lenses in the optical boxes, rendering them ineffective.

c) The machines should be adjusted according to:

i. the size of the beans being sorted.

ii. the level of defects in coffee; and

iii. the types of defects in the product to be sorted.

d) Correct flow rate is necessary for proper sorting.

e) Thorough pre-sorting should be done by hand on a sample of the batch of beans to assess the level of defects to be removed. This can assist in limiting the number of sorting cycles required to adequately clean up the coffee.

f) Only coffee beans of a specific size should be sorted at any one time.

g) A maximum of 3% slightly defective beans by weight is allowable in a premium exportable grade of coffee.

h) During hand sorting a batch of green coffee beans should be evenly distributed on a levelled surface and defective beans and extraneous matters should be removed. The sorting should be done according to good manufacturing practices (GMPs).

B.5 Packaging and storage of green beans

a) Packaging material should be clean, strong and free from odours or taints. Jamaica High Mountain ® Supreme and Jamaica Blue Mountain ® premium grades are usually packaged in wooden barrels made from odourless poplar wood. All wooden barrels should be treated to prevent/remove pest infestation.

b) Graded coffee shall be packaged according to grades and be kept separate in distinctly labelled heaps or lots in the warehouse.

c) Store coffee on pallets – coffee will absorb moisture from concrete floors if direct contact is made.

d) Bags of coffee should be stacked with adequate space between each heap to allow the easy passage of air throughout all sections of the building.

e) The bags of coffee should be stacked at least 1.0 m below the level of the roof thus allowing air to circulate freely over the product. Circulating air prevents the temperature from rising excessively.

f) The bags should never be stacked with any side of the pile touching any outer wall – walls like the floors provide moisture for the coffee to absorb.

g) During the wetter months, the relative humidity of the ambient air should be controlled at 55% – 65%.

h) Coffee will maintain freshness when it is stored at about 24 °C - 29 °C. Product moisture should be monitored.

i) A de-humidifier can be employed to control the humidity.

B.6 Procedures for shipping

a) For best results, coffee is best shipped in ventilated containers.

b) Shipping containers should be clean and free from any odour that will contaminate the coffee.

c) Coffee should not be shipped with chemicals.

d) Shipping containers should be checked to ensure that there are no holes through which water may enter and damage the beans.

e) Containers should be lined with craft paper which will absorb any condensation which may be formed in the container during shipment from tropical climates to temperate regions.

f) All wooden packaging should be certified as heat treated and or fumigated.

B.7 Procedures for packaging roasted coffee

The coffee should be packaged in a manner that will allow it to remain fresh for a desired period. The coffee can be packaged in containers made of different types of materials ranging from heavy gauge plastic bag or to aluminium foil bags and cans.

a) Paper is the least effective material in ensuring that freshness of the product is maintained. Therefore, it should not be used.

b) The foil bag, especially when it is vacuum-sealed, will be most effective in maintaining the freshness of the product. Triple ply foil bag is recommended with a combined gauge of 94 micrometre for the aluminium and plastic materials.

c) Polythene or any plastic package will be more effective when the product is gas-flushed during the packaging process.

d) Plain sealed polythene bags will only maintain coffee at a minimal level of freshness for about six weeks.

e) Polythene bags with one-way valves will maintain freshness for longer periods.

f) All containers with coffee described as "vacuum packed" shall give a minimum reading of 685.8 mm of mercury or 13.26 psi when tested with a standard puncture type vacuum gauge within one minute after packaging. The recommended vacuuming pressure is 760 mm of mercury (1 Atmosphere) or 1014 mm bars.

g) The residual oxygen in the package should not exceed 2%-3%.

h) Allow coffee to cool properly to room temperature, i.e. 27 °C prior to packaging.

i) Allow roasted coffee to degas, especially when a valve bag will not be used to package the product. Do not water quench the roasted coffee as this will result in premature staling.

Table B.1 — Recommended shelf life for the various modes of packaging roasted coffee

TYPES OF PACKAGING	SHELF LIFE
Sealed polythene bags	Not more than 4 weeks
Laminated foil bags (no valve)	Not more than 6 months
Heavy gauge foil bags (with one way valve)	9-12 months
Heavy gauge foil and plastic stand-up pouch bags (with one-way valve)	9- 12 months
Tin cans (vacuumed)	Not more than 12 months

B.8 Storage of roasted coffee

As roasted coffee degasses, it starts to deteriorate, giving off volatile gases. The essential oils and compounds in the beans become oxidized as free air comes in contact with them. It is therefore important that the coffee is stored in a clean dry area, free of all foreign odours like spices, seasonings or mustiness. Consumers are encouraged to buy packages of convenient sizes that can be used within a relatively short time after it is opened. After packages are opened, the remaining portion should be placed in an airtight container and placed in the refrigerator.

B.9 Guidelines for brewing of coffee

a) Properly roasted and packaged coffee can be spoilt if it is not brewed and handled properly.

b) The choice of brewing equipment is dependent on the degree of grind of the coffee.

c) Brewing equipment should be kept clean, free from detergent traces or stale coffee residues.

d) Approximately 50 cups of beverage can be obtained from every 454g of medium dark roasted coffee. The number of cups may vary according to one's preference.

e) After the brewing cycle has been completed the spent grounds should be removed from the brewing equipment. Over-extraction makes the brew very bitter or astringent.

f) The brewed coffee should not be held for more than three hours after brewing.

The beverage develops a cooked or unpleasant taste if it is held for too long in the brewer.

g) The coffee should not be reheated. If it becomes cold, it can be used as iced coffee or other refreshing cold coffee drink.

NOTE Clean, fresh water preferably filtered water should be used when coffee is being brewed. Spring water if available is preferable.

Figure B.1 — Standard cherry coffee measuring box

Annex C
(normative)

Soluble coffee quality standards

Table C.1 — Soluble coffee quality standards

Solubility	Good Water Solubility - 2.5 grams of the product shall dissolve in 150ml of boiling water in 30 seconds, with moderate stirring
Usual Package	Sealed Airtight Bottles and Sachets
Cup Cleanliness	Clean - Void of all coffee related Taints and Faults
Aroma	Fairly Good to Intense characteristic coffee aroma
Mouth-feel	Medium to Good Acidity, light body
Cup Quality	The brew shall have the characteristic colour, flavour and aroma of coffee
Moisture %	4.5

NOTE Adopted from the JACRA Soluble Coffee Standard.

Annex D
(normative)

Cleanliness test method (insoluble sediments) in coffee

NOTE This test does not apply to coffee containing micronized roasted coffee (MRC).

D.1 Insoluble sediments test

D.1.1 General method:

a) Dissolution of a sample of soluble coffee in hot water.

b) Filtration with standard filter paper.

c) Comparison of the amount and particle size retained on the filter with the help of the sediment filtration standard.

D.1.2 Equipment and materials

a) Digital Scale with sensitivity of 0.01g;

b) Sediment funnel filter, according to the scheme presented in Figure F.2 of this standard, with the filtration area of 30mm;

c) Beakers of 600mL;

d) Stirrer glass;

e) Sediment filter comparison standard (see Figure D.1 of this standard);

f) Filter test to retain sediment particles down to 1.6 microns;

g) Tablespoon; and

h) Distilled water to boiling point and room temperature (20 °C to 25 °C, approx.).

D.1.3 Procedure

NOTE This test must be performed in duplicate.

D.1.3.1 For soluble solid coffee

a) Weigh into a 600mL beaker, a 5g sample of soluble coffee dry basis.

b) Add 300mL of hot distilled water at 90 °C ± 5 °C and dissolve the sample completely using a glass stirrer.

c) Place a filter clearly identified in the filtration funnel.

d) Pour into the filtration funnel the solution in (b), while opening the water valve to help the filtration process.

e) Rinse into the filtration funnel, the stirrer and beaker with 300mL hot distilled water at 90°C ± 5°C.

f) Rinse the beaker into the filtration funnel with 100mL of water at room temperature. Repeat this operation two more times.

D.1.4 Result interpretation

a) Once the sample is filtered, remove the filter funnel and compare with the standard (see Figure D.1).

b) After the comparison, perform the indicated filter fold and record the results in it.

c) Report the results according to the note (name or letter) as appropriate.

Table D.1 — Results identification

Note	Result identification	
1	Clean	A
2	Good	B
3	Acceptable	C
4	Sediments in excess	D

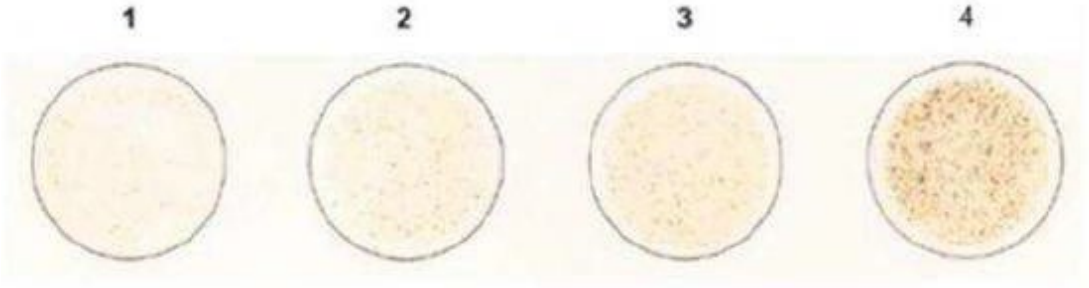

Figure D.1 — Insoluble particles determination standard for soluble pure coffee regular and decaffeinate

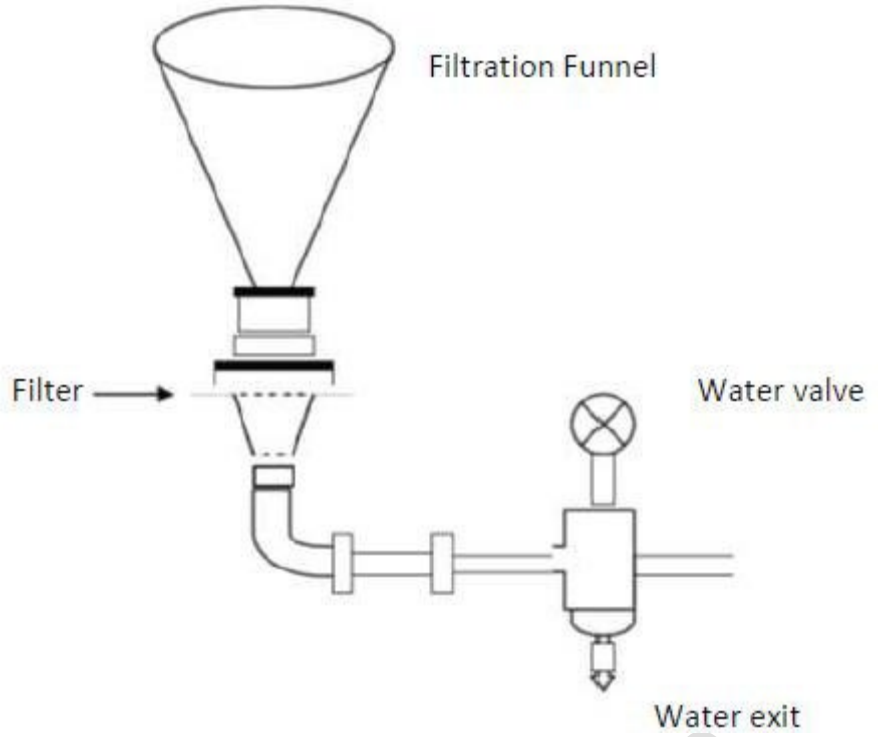

Figure D.2 — Filtration system for sediment determination

Standards Council

The Standards Council is the controlling body of the Bureau of Standards and is responsible for the policy and general administration of the Bureau.

The Council is appointed by the Minister in the manner provided for in the Standards Act, 1968. Using its powers in the Standards Act, the Council appoints committees for specified purposes.

The Standard Act, 1968 sets out the duties of the Council and the steps to be followed for the formulation of a standard.

Preparation of standards documents

The following is an outline of the procedure which must be followed in the preparation of documents:

a) The preparation of standards documents is undertaken upon the Standards Council's authorization. This may arise out of representations from national organisations or existing Bureau of Standards' Committees or Bureau's staff. If the project is approved, it is referred to the appropriate sectional committee or if none exists a new committee is formed or the project is assigned to a Bureau staff.

b) If necessary, when the final draft of a standard is ready, the Council authorizes an approach to the Minister in order to obtain the formal concurrence of any other Minister who may be responsible for any area which the standard may affect.

c) With the approval of the Standards Council, the draft document is made available for general public comments. All interested parties, by means of a notice in the Press, are invited to comment. In addition, copies are forwarded to those known and interested in the subject.

d) The committee considers all the comments received and recommends a final document to the Standards Council.

e) The Standards Council recommends the document to the Minister for publication.

f) The Minister approves the recommendation of the Standards Council.

g) The declaration of the standard is gazetted and copies placed on sale.

h) On the recommendation of the Standards Council, the Minister may declare a standard to be compulsory.

i) Amendments to and revisions of standards normally the same procedure as is applied to the preparation of the original standard.

Overseas Standards documents

The Bureau of Standards maintains a reference library which includes the standards of many overseas standard organizations. These standards can be inspected upon request.

The Bureau can supply, on demand, copies of standards produced by some national standards and is the agency for the sale of standards produced by International Organisation for Standardization (ISO) members.

Application to use the reference library and to purchase Jamaican and other standard documents should be addressed to:

Bureau of Standards
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P.O. Box 113,
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