



**Papua New Guinea
Coffee Industry
Corporation Limited**



PAPUA NEW GUINEA COFFEE SAMPLE GUIDE

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GREEN COFFEE SAMPLES

Coffee buyers evaluate the quality and consistency of coffee by tasting (“cupping”) production lots, and by measuring certain physical characteristics like defect count and moisture. Samples are drawn many times throughout the life of a lot from production through roasting for many reasons: diagnostic, marketing, contract validation, and to assess quality change as coffee ages.

Regardless of the purpose, the most important point to remember about green coffee samples is they are meant to accurately represent a larger quantity. For that reason, samples should always be collected in a way that gives equal representation to all bags in a lot. They must never be cleaned or otherwise handled differently than the stocks they represent, as this defeats the purpose of sampling.

WHO EVALUATES SAMPLES?

PRODUCERS

Coffee producers (farmers and exporters) evaluate coffee samples to verify production quality meets their standards, and when determining the outcome of changes in procedures – such as when adjusting processing times and techniques.

Producers use samples when marketing to new or existing clients, for contractual approvals during the product shipment cycle, and also stored after shipment for future quality verification.

COFFEE BUYERS

Coffee consumers, including importers and coffee roasters, request coffee samples for evaluation of quality, value, and/or suitability for an application. Commodity coffees are evaluated by physical inspection of green coffee with a pass/fail sensory evaluation of taste or taste uniformity.

Differentiated coffees are often tasted to evaluate and describe sensory characteristics like fragrance, flavor, acidity, and mouthfeel. Tasting is conducted using strictly defined parameters for sample roasting, tasting environment, water, and brewing, so that variables affecting coffee taste remain consistent across all samples.

REGULATORS

Regulators and certifying agencies use samples to evaluate coffee lots prior to export – either to categorize them by national quality grade, confirm they meet minimum export standards, or to validate authenticity of shipments. Most national grading schemes rely mainly on physical examination of green coffee as a primary indicator of quality (bean size, density, color, moisture, and defect count), sometimes with a binary pass/fail sensory evaluation of taste.

CATEGORIES OF SAMPLES

LOT SAMPLE

Producers may segregate lots of production with unique characteristics (e.g. by location, community, tree variety, or process, resulting in different sensory qualities) for the purpose of selling them at a premium price. Lots can be as large as one or more ocean containers, or as small as a few 60kg bags. Lots of 100 bags or less are often referred to as microlots. Single bags or fractional bags (few

kilos) are sometimes referred to as nanolots.

TYPE SAMPLE

Type samples are generally representative of coffees made by a producer but not necessarily from a specific lot immediately available for sale. Type samples are often used in marketing between seasons or when selling coffees only categorized by national grade but not unique production run.

APPLICATION

OFFERS

Samples (either type or lot) are sent by producers to buyers for purchase consideration. Type samples may be offered for immediate purchase (known as spot offers and purchases) or to reasonably represent coffees expected for forward contracts. Forward contracts are agreements to buy similar coffee at some future date, almost always within the same harvest season.

Lot sample offers are always spot offers, as they only represent a lot presently in inventory and available for sale.

PRE-SHIPMENT

A pre-shipment sample always represents coffees being prepared for shipment. In some contracts,

an approved pre-shipment sample may trigger payment, a portion of payment, or start a countdown to payment.

For spot purchases, an offer sample may fulfill the role of a pre-shipment sample. However, if significant time has passed between offer and shipment, the buyer may request an additional pre-shipment sample to assess any changes in quality.

ARRIVAL

Arrival samples are collected from the shipment upon arrival. These are often compared directly to pre-shipment samples (taste and physical inspection) to confirm authenticity and detect any damage in shipment.

CONTRACT TERMS

Samples often play an important role meeting purchase contract conditions:

- **SAS NANS** – Sales contracts often include the condition Subject to Approval Sample, No Approval, No Sale. This means the buyer may cancel the sale by rejecting either the pre-shipment or arrival sample.
- **SAS PSS** – Subject to Approval of Sample, Pre-ship Sample. Purchase is contingent only on the buyer's approval of the pre-ship sample, but not the arrival.
- **SAS Arrival** – Subject to Approval of Sample, Arrival Sample. Purchase is contingent on the buyer's approval of the arrival sample.

- **SAS Replace** – Purchase is contingent on the buyer's approval of a sample, with new lots offered to replace rejected samples. If one is rejected, a second or third may be sent. Contracts sometimes specify the number of replacements.

In the event of rejection, contract terms and seller/buyer relationship dictate the outcome. Both parties often reach an alternate agreement on price or future order parameters. If unable to reach agreement, disputes are resolved by binding arbitration pursuant to popular contract terms.

Producers should retain samples of coffees shipped for up-to one year after shipment to aid in the resolution of possible quality disputes.

COLLECTION OF SAMPLES

Coffee samples are typically collected from bags representing 15-20% of the total shipment – alternating between top, bottom, and the middle sections at varying depths. Green coffee stored in jute is pulled with a sample spear (also known as a puller, trier, or probe) that pierces the bag to remove small quantities. Coffees stored in GrainPro or Ecotact brand liners are often removed randomly by hand to avoid damage.



Samples stored as parchment are collected at ~5:4 ratio of needed final weight or ~2:1 if stored as dried natural cherry. A sample huller may be used to finish processing for type samples but green coffee processed on full scale production equipment is expected for lot samples.



Green coffee moisture content should be no less than 9% and no more than 13% by weight.

SAMPLE SIZE

Green sample size is a matter of preference for the application and the user:

- **Marketing and Offers (150-250g):** Conventional barrel-style sample roasters (preferred by importers and larger/established coffee roasters) often have a capacity of 125g to as much as 250g. Marketing or offer samples are customarily 150g to 250g. 250g is preferred to allow for an optional second roast, where possible.

- **Exceptions:** It is always best to ask and confirm the sample size expectations of the receiver. Some cuppers prefer electric sample roasters, like the Ikawa Pro, that offer special features like smartphone programmability. An Ikawa's maximum capacity is only 50g, meaning that 150g samples are ample for users of these devices. Others prefer to roast samples on a small production roaster, like the 1kg capacity Probatino, for maximum transferability to full scale production. The minimum charge size for a 1kg roaster is no less than 400g but more manageably 600g and possibly more. It is not unreasonable to ask a prospective buyer to pay for larger than standard samples, particularly when evaluating high value coffees.

- **Pre-shipment / Arrival (350-500g):** Samples triggering payment or other contractual obligations receive more scrutiny than those used in marketing. Pre-shipment and arrival samples are routinely graded for physical defect count in addition to cup quality. Green coffee grading by SCA rules requires a minimum 350g, ICE (Intercontinental Exchange) rules for commodity stocks require 700g. As seller and buyer develop trust from continuing trade over several seasons, this quantity may be reduced but shipment samples are unlikely to be eliminated.
- **Post-shipment (500g-1kg):** Sellers should retain and catalog between 500g to 1kg

of every customer shipment for comparison to disputed arrival samples, for internal diagnostic evaluation (such as comparison to other lots), or as a catalog of customer flavor preference.

- **Portfolio (5-10kg):** Small exporters should retain 5-10kg of coffees from throughout the season that are representative of their typical production and best lots from each season. These are used to prepare the type samples used in marketing and offers throughout the year, but particularly between seasons

with no spot lots are available for customer consideration. The quantity retained is flexible and at the discretion of exporters – some may save on 500g of a lot, others may hold back an entire bag. The concept is important, as these coffees are the marketing representation of the business year-round when shipping samples, visiting clients or prospective clients, and attending tradeshows or events. Samples should be stored in a cool, dark place with consistent moderate humidity for quality retention over time.

PACKAGING



the company brand for easy identification when on a table with hundreds of others from around the world.

Sample packs for green coffee do not need one-way gas valves like roasted coffee, but the same packs may be used for both if more convenient.

Packs should be sealed to avoid spillage in transit, either with press to seal closures, heat sealing, or both. Never staple bags, as it weakens the package and is a nuisance to receivers that can also contaminate the sample with metal staples.

Sample packs make a first impression with coffee importers that demonstrates professionalism as an organization and potential ability to deliver promises as a trading partner.

Bags should be rigid or sturdy, sealed, and clearly labeled with identifying criteria. The material may be clear or opaque and food grade quality. Where possible, these should also include

ALWAYS DISPLAY

- Exporting company and contact information (contact name, phone, email, website)
- Type or Lot Sample
- Sample or lot identifying information
- Processing method
- Crop year or ship date
- National coffee grade (if applicable)
- Certifications, e.g. organic, Fair Trade, RFA, others
- Mark each “SAMPLE: NO COMMERCIAL VALUE” in case of questions on arrival at customs.

OPTIONAL BUT RECOMMENDED

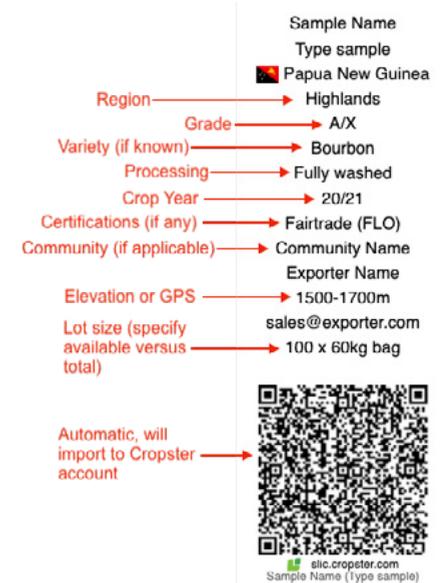
- Location (with GPS coordinates and elevation, if available)
- Community/regional name, estate name, or washing station (if applicable)
- Variety (if known)
- Lot size and availability (if applicable)

Note that offer price is not typically printed on package labels. Offer prices change by client and market condition and are best included as a separate printed attachment sheet or withheld until requested by a prospective buyer.

LABEL PRINTING

Labels may be designed and printed using any label making software or a MS Word template. In addition, Cropster, makers of popular roasting and cupping data collection tools, produced a free label-making web page at <https://slic.cropster.com/create-samples>.

The tool is simple and customizable for one-off samples with an optional spreadsheet form for batch printing upon request. Labels printed using Cropster’s tool also include a QR barcode that may be scanned by the receiver to conveniently import label information directly into a Cropster account for roasting and evaluation.



ROASTED SAMPLES

Green coffee samples are used for nearly all quality evaluation but roasted samples may sometimes be requested.

If preparing roasted samples:

- Confirm the sample size and any roast profile preferences
- Where not specified, follow SCA protocols for sample preparation: <https://sca.coffee/research/protocols-best-practices>
- Seal roasted sample in a pack with one-way valve for degassing
- Check that no special import procedures exist for roasted coffee that differ from green in the receiving country
- Ship for arrival at the destination within 1-2 days of roasting. Coffee samples are typically evaluated the morning after roasting.



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