

THE COLOMBO TEA TRADERS' ASSOCIATION

P .O. Box 274
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Circular No. 13 of 2021

May 25, 2021

FOR THE ATTENTION OF THE CEO

MOISTURE MEASUREMENTS IN TEA

On 1st January 2021, Circular No. AL/MQS-02/2021 under the subject of “Sri Lanka Tea Board Standards / Directives for Tea”, was issued to the industry by the Sri Lanka Tea Board. Accordingly, all stakeholders were advised to follow the standards / directives.

The subject matter of moisture content in Tea has been deliberated at the monthly CTTA Meetings and a decision was taken for the producers who have moisture measuring equipment to document the moisture content in the invoice particulars with effect from 1st April 2021. In this regard, reference is made to CTTA Circular No. 04 of 2021, under the caption “Moisture Measurements”. The importance of procuring moisture meters by factories, who do not have such measuring equipment has been stressed.

Importing countries like Turkey, Russia and Iran have reported a high percentage of moisture at the point of import. The possibility of Ceylon tea, losing markets resulting in a decline in prices and shipments being rejected is a reality, unless this matter is addressed by the stakeholders.

The SLTB has released notifications relating to moisture content in 2001, 2017 and 2018. The notification issued in 2018, specifies that the moisture content at the point of pre-auction be 6.5%.

The maintenance of moisture content in tea, at different stages is multi-factorial and associated with firing continuously, whilst operating the furnace and the dryer efficiently. A large number of grades in low country manufacture (now resorted to by many high and mid grown factories) and the considerable time taken for packing that results in the building up of stocks, leads to absorption of moisture and therein special attention will be required to minimize such absorption. The moisture of teas at dryer mouth and maintaining records towards taking corrective actions is a pre-requisite at the operational level.

Annexed is a document by the Tea Research Institute, styled “Known Practices & Necessary Measures / Steps for Adaptation” on the following stages:

Stage 1 at Factory Dryer Mouth
Stage 2 at Factory Dispatch
Stage 3 at Pre-auction Teas
Stage 4 at Pre-shipment Teas

Considering the supply / value chain, consistent measurement of moisture in the brokers' warehouses as well as measurements at pre-shipment of teas at the exporters, are a critical aspect of this initiative, necessitated by the strictures on moisture imposed by importing countries.

Amongst methods available for determination of moisture content in food materials, the ISO1573: Tea - Determination of Loss in Mass at 103°C standard gravimetric method is the most accurate, but not practically useful for day to day work. This method is time consuming.

Quoted below is an extract from a letter received from the Director / TRI which is self-explanatory.

Quote

The infrared (IR) method, moisture content is directly measured by evaporation of water from a sample with an infrared heating lamp. IR moisture analyzers feature a precisely controlled halogen heating system which supports to yield fast and repeatable results with a reliability upto 0.01%, and time taken to measure one sample is around 15 minutes.

Unquote

The TRI also comments on a near-infrared (NIR) method for moisture measurements. However, due to exorbitant costs of such a unit, it is not an affordable solution. It is imperative that moisture analyzers used in the tea industry are calibrated against ISO1573 method to obtain accurate results. It therefore follows that any type of moisture measurement equipment procured, be calibrated against ISO1573, for near accuracy. The suppliers should be advised to calibrate the units against this ISO method and certify same, prior to purchase.

The CTTA solicits the cooperation of all stakeholders to address this issue towards maintaining the quality of Ceylon teas. The success of this initiative will depend on stakeholders willingly following guidelines and recommendations during the supply line.

**THE SECRETARIAT
THE COLOMBO TEA TRADERS' ASSOCIATION**