

# වැවිලි අමාත හාංශය பெருந்தோட்ட அமைச்சு MINISTRY OF PLANTATION

ශී ලංකා තේ මණ්ඩලය இலங்கை தேயிலைச் சபை SRI LANKA TEA BOARD



Circular No.: AL/MQS-02/2021

1st January, 2021

## TO ALL REGISTERED TEA MANUFACTURERS, TEA EXPORTERS AND IMPORTERS OF TEA FOR VALUE ADDITION AND RE-EXPORT OF THE SAME

Dear Sirs,

## Sri Lanka Tea Board Standards/ Directives for Tea

Issued under the Sri Lanka Tea Board Law No. 14 of 1975, Tea Control Act No 51 of 1957, Tea (Tax & Control of Export) Act No 16 of 1959 and Sri Lanka (Import & Export) Regulations 1981 - Scheme for import of tea for blending and export thereafter (This Circular Supersedes Tea Board Circular No.: AL/MQS-Rev/2010, issued on 26<sup>th</sup> April 2010)

Sri Lanka Tea Board as the monitoring authority of quality standard of teas exported is mandated to protect the image of 'Ceylon tea' established globally. As you are aware, Tea Board has introduced a set of standards/guidelines in the year 2008, and then revised in 2010 under the power vested by its Act. As a protective measure of teas produced from Sri Lanka, Tea Board has introduced and implements Standards and Directives for "Sri Lankan Origin Teas" and "Other Origin Teas" which are imported for re-export purposes. The Minimum Quality Standard (MQS) will cover both ISO 3720 for Black Tea and ISO 11287 for Green Tea.

- 02. The directives pertaining to the limits indicated in this circular (Annexure - A other than the established ISO standards, i.e. Extraneous matters, Detectable Metals, Microbial Contaminants and Maximum Residue Limits of Pesticides etc.,) are required to be complied by all registered manufacturers and exporters of Sri Lankan Origin Tea.
- 03. The limits indicated in the Annexure - B are considered as standards and should be strictly applicable for all other origin teas at the point of importation and exportation of the same after value addition. Hence non conformity of such standards in any other origin teas will be treated as grounds for rejection of import / re-export.
- 04. The above Directives and Standards are implemented with effect from 1<sup>st</sup> January, 2021.

1 of 2

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05. Any further clarification in this regard could be obtained from the Director (Analytical Services), Analytical laboratory of Sri Lanka tea Board, No. 574, Galle Road, Colombo 03, Sri Lanka, or on Telephone/ Fax no. 0112581576 during the office hours or by via e-mail lab@pureceylontea.com.

Yours truly,

Jayampathy Molligoda

Grand gree dorden

Chairman

Sri Lanka Tea Board

## Copies:

Secretary, Ministry of Plantation

Secretary, Ministry of Company Estate Reforms Tea and Rubber Estate Related Crops

Director, Tea Research Institute of Sri Lanka

Director General, Sri Lanka Tea Board

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Chairman, Tea Small Holdings Development Authority

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Chairman, Sri Lanka Federation of Tea Smallholder Development Societies

Tea Commissioner/ Deputy Tea Commissioner (Exports), Sri Lanka Tea Board

Director - Tea Promotion, Sri Lanka Tea Board

Director -Analytical Services, Analytical Laboratory of Sri Lanka Tea Board

## SLTB Circular No: AL/MQS-02/2021 ~ Annexure A

## Sri Lanka Tea Board Minimum Quality Standards (MQS) for "Sri Lankan Origin Tea"

## 1) Basic Requirements for 'Black Tea': ISO 3720: 2011 Sri Lanka Standards 135:2009 (AMD 421:2011)

Characteristic	Requirement	Test Method Ref.
	Black Tea	
1. Water extract, mass fraction	min. 32 %	ISO 9768:1994; SLS 28 Part
		7:2008
2. Total Ash, mass fraction	min. 4% - max. 8%	ISO 1575:1987; SLS 28 Part
		3:2008
3. Water - soluble ash,	min. 45%	ISO 1576:1988; SLS 28 Part
mass fraction of total ash		4:2008
4. Alkalinity of water-soluble ash	min. 1.0% - max. 3.0%	ISO 1578:1975; SLS 28 Part
(as KOH), mass fraction		6:2008
5. Acid insoluble ash, mass	max. 1.0%	ISO 1577:1987; SLS 28 Part
fraction	1 - v - v - v - v - v - v - v - v - v -	5:2008
6. Crude fibre, mass fraction	max. 16.5%	ISO 15598:1999;SLS 28 Part
		8:2008
7. Total polyphenols, mass	min. 9%	ISO 14502-1: 2005; SLS 28
fraction		Part 9/ Section 1: 2011

## 2) Basic Requirements for 'Green Tea': ISO 11287: 2011 Sri Lanka Standards 1413:2011

Characteristic	Requirement	Test Method Ref.
	Green Tea	
1. Water extract, mass fraction	min. 32 %	ISO 9768:1994; SLS 28 Part
		7:2008
2. Total Ash, mass fraction	min. 4% - max. 8%	ISO 1575:1987; SLS 28 Part
		3:2008
3. Water - soluble ash,	min. 45%	ISO 1576:1988; SLS 28 Part
Mass fraction of total ash		4:2008
4. Alkalinity of water-soluble ash	min. 1.0% -	ISO 1578:1975; SLS 28 Part
(As KOH), mass fraction	max. 3.0%	6:2008
5. Acid insoluble ash, mass	max. 1.0%	ISO 1577:1987; SLS 28 Part
fraction		5:2008
6. Crude fibre, mass fraction	max. 16.5%	ISO 15598:1999;SLS 28 Part
		8:2008
7. Total catechins, mass fraction	min. 7%	ISO 14502-2: 2005; SLS 28
		Part 9/ Section 2: 2011
8. Total polyphenols, mass fraction	min. 11%	ISO 14502-1: 2005; SLS 28
		Part 9/ Section 1: 2011
9. Ratio total catechins to total	min. 0.5	-
polyphenols, mass fraction		

### SRI LANKA TEA BOARD DIRECTIVES FOR 'MQS'

These 'directives' has been issued under the regulatory power by Sri Lanka Tea Board Law No. 14 of 1975, Tea Control Act No. 51 of 1957 and Tea (Tax and Control of Export) Act No. 16 of 1959 and their subsequent amendments aiming to minimize the presence of health risk hazard/s for its consumers. Tea Board directives are voluntary private standards aiming to provide quality assured tea for 'Ceylon tea' consumers. However, exporters of 'Sri Lankan Origin Tea' should be guided by the standards stipulated by respective health authorities and Custom requirements in the destination port and/or tea importing country.

## 3) Foreign Matter/ Extraneous Matters - Completely free

(Teas should comply with ISO 3720:2011 and ISO 11287: 2011 parameters specified above)

## 4) Detectable Metals:

	Name of Metal	Acceptable Limit	Test Method/s
1.	Iron (as ferrous)	- max. 300 mg/kg	AAS/ICP-MS/OES
2.	Copper	- max. 100 mg/kg	AAS/ICP-MS/OES
3.	Lead	- max. 2 mg/kg	AAS/ICP-MS/OES
4.	Zinc	- max. 100 mg/kg	AAS/ICP-MS/OES
5.	Cadmium	- max. 0.2 mg/kg	AAS/ICP-MS/OES
6.	Sodium	- max. 0.7% (m/m)	AFS/FFM

(AAS - Atomic Absorption Spectrophotometry; ICP - Inductive Coupled Plasma Spectroscopy - MS/OES; AFS - Atomic Flame Emission Spectrophotometry and FFM -Flame Photometry Techniques, wherever applicable)

### 5) Microbiological Requirement:

Characteristic	Requirement		Test Method Ref.	
	Black Tea	Green Tea		
Total Plate Count	Max. 10,000 cfu/g		ISO 4833-1: 2013; SLS 516 Part 1/ Section 1: 2013	
Yeast & Moulds	max.1,000 cfu/g		ISO 21527-2: 2008; SLS 516 Part 2/ Section 2:	
Count			2013*	
Total Coliform Count	max.10 MPN/g		ISO 4831: 2006; SLS 516 Part 3/ Section 1: 2013	
E-Coli	Absent / g		ISO 7251: 2005; SLS 516 Part 12: 2013	
Salmonella	Absent / 25 g		ISO 6579:2002; SLS 516: Part 5: 1992	

#### \* Note

- 1). Teas under damp/ wet condition (Water activity,  $A_w > 95\%$ ) are required to use test method: ISO 21527-1: 2008: SLS 516: Part 2/ Section 1: 2013.
- 2). In addition to the above, concerned parties should be guided by the standards applicable in the destination country as required by the importer.

## 6) Permissible Maximum Residue Levels (MRLs) for Pesticides in final product of tea:

Following Seventeen (17) pesticides are permitted in final product of tea which were recommended by the Tea Research Institute of Sri Lanka (TRISL) as revised by the TRI Advisory Circular No. PU 1: Serial No. 01/20; issued in November 2020. Therefore, Sri Lankan Origin Tea should not contain residues of any other pesticides. Importantly, exporters of tea should be guided by the standards in the importing country. Maximum Residue Limits (MRLs) established by EU and Japan for the respective pesticides are given for information and necessary guidance.

1	Name of the	Category/	MRL	MRL
F	Pesticide	type	EU Regulation (EC)	Japan: Positive list
			mg/kg (ppm)	mg/kg (ppm)
1.	Brunolium/Tar Acids	F	Exempted	Exempted
2.	Calcium hydroxide	N/A	Exempted	Exempted
3.	Chlorantraniliprole	I	0.02	50
4.	Copper hydroxide	F	40 (as Cu)	Exempted
5.	Copper oxide	F	40 (as Cu)	Exempted
6.	Diazinon	I	0.05	0.1
7.	Diuron	W	0.05	1
8.	Fipronil	I	0.005	0.002
9.	Fluopyram	N	0.05	=
10.	Glufosinate ammonium	W	0.10	0.30
11.	Glyposate	W	2	1
12.	Hexaconazole	F	0.05	0.01*
13.	Methylisocyanate/Met	am N	0.02	0.10
14.	Oxyfluorfen	W	0.05	0.01*
15.	Propiconazole	F	0.10	0.10
16.	Sulphur	A/I	Exempted	Exempted
17.	Tebuconazole	F	0.05	80

A-Acaricide; F-Fungicide; I-Insecticide; N-Nematicide; W-Weedicides; N/A-Not Applicable

An issuance of updated Sri Lanka Tea Board Standards/ Guidelines for tea is subject to periodical revision, as decided by the Sri Lanka Tea Board.

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<sup>\*:</sup> Denotes that MRLs are not established by the respective Authority. However, default MRL of 0.01mg/kg is defined as the Limit.

Circular No: AL/MQS- 02/2021 ~ Annexure B

### Sri Lanka Tea Board Minimum Quality Standards (MQS) for "Other Origin Tea"

These 'Sri Lanka Tea Board directives' has been issued under the regulatory power vested by Sri Lanka Tea Board Law No. 14 of 1975, Tea Control Act No. 51 of 1957 and Tea (Tax and Control of Export) Act No. 16 of 1959 and their subsequent amendments aiming to minimize the presence of health risk hazard/s for its consumers.

Under the Sri Lanka Tea Board (Import and export) Regulations 1981, any registered tea exporter is given permission to import 'other origin tea' for blending and re-export thereafter following the terms and conditions therein the Regulations.

Note: In addition to the following criterion, concerned parties should be guided by the standards applicable in the respective destination country as required by the importer.

1) Basic Requirements for 'Black Tea': ISO 3720: 2011

Characteristic	Requirement	Test Method Ref.
	Black Tea	
1. Water extract, mass fraction	min. 32 %	ISO 9768:1994
2. Total Ash, mass fraction	min. 4% - max. 8%	ISO 1575:1987
3. Water - soluble ash, mass fraction of total ash	min. 45%	ISO 1576:1988
4. Alkalinity of water-soluble ash (as KOH), mass fraction	min. 1.0% - max. 3.0%	ISO 1578:1975
5. Acid insoluble ash, mass fraction	max. 1.0%	ISO 1577:1987
6. Crude fibre, mass fraction	max. 16.5%	ISO 15598:1999
7. Total polyphenols, mass fraction	min. 9%	ISO 14502-1:2005

#### 2) Basic Requirements for 'Green Tea': ISO 11287: 2011

Characteristic	Requirement	Test Method Ref.
	Green Tea	
1. Water extract, mass fraction	min. 32 %	ISO 9768:1994
2. Total Ash, mass fraction	min. 4% - max. 8%	ISO 1575:1987
3. Water - soluble ash,	min. 45%	ISO 1576:1988
Mass fraction of total ash		
4. Alkalinity of water-soluble ash	min. 1.0% - max. 3.0%	ISO 1578:1975
(As KOH), mass fraction		
5. Acid insoluble ash, mass fraction	max. 1.0%	ISO 1577:1987
6. Crude fibre, mass fraction	max. 16.5%	ISO 15598:1999
7. Total catechins, mass fraction	min. 7%	ISO 14502-2:2005
8. Total polyphenols, mass fraction	min. 11%	ISO 14502-1:2005
9. Ratio total catechins to total	min. 0.5	-
polyphenols, mass fraction		

3) Moisture Content: Moisture content of tea at the point of importation - Max 6.5 %

(Applicable Test Methodology should be compliance with ISO 1573: 1980)

## 4) Foreign Matter/ Extraneous Matters - Completely free

(Teas should comply with ISO 3720:2011 and ISO 11287:2011 parameters specified above)

### 5) Detectable Metals:

	Name of Metal	Acceptable Limit	Test Method/s
1.	Iron (as ferrous)	- max. 300 mg/kg	AAS/ICP-MS/OES
2.	Copper	- max. 100 mg/kg	AAS/ICP-MS/OES
3.	Lead	- max. 2 mg/kg	AAS/ICP-MS/OES
4.	Zinc	- max. 100 mg/kg	AAS/ICP-MS/OES
5.	Cadmium	- max. 0.2 mg/kg	AAS/ICP-MS/OES
6.	Mercury	- max. 0.3 mg/kg	AAS/ICP-MS/OES
7.	Arsenic	- max 0.05 mg/kg	AAS/ICP-MS/OES
8.	Chromium	- max 1.0 mg/kg	AAS/ICP-MS/OES
9.	Rare-Earth Elements (16	Nos)- max 2.0 mg/kg	ICP-MS/OES
10	. Sodium	- max. 0.7% (m/m)	AFS/FFM

(AAS - Atomic Absorption Spectrophotometry; ICP - Inductive Coupled Plasma Spectroscopy - MS/OES; AFS - Atomic Flame Emission Spectrophotometry and FFM - Flame Photometry Techniques, wherever applicable)

6) Microbiological Requirement:

Characteristic	Requirement	Requirement	
	Black Tea	Green Tea	
Total Plate Count	Max. 10,000 cfu.	/g	ISO 4833-1: 2013
Yeast & Moulds Count	max.1,000 cfu/g		ISO 21527-2: 2008*
Total Coliform Count	max.10 MPN/g		ISO 4831: 2006
E-Coli	Absent / g		ISO 7251: 2005
Salmonella	Absent / 25 g		ISO 6579:2002

<sup>\*</sup>Note:

- 1). Teas under damp/ wet condition (Water activity,  $A_w > 95\%$ ) are required to use test method:: ISO 21527-1: 2008.
- 2). In addition to the above, concerned parties should be guided by the standards applicable in the destination country as required by the importer.

#### 7) Pesticide Residues:

<u>Note:</u> The MRLs given below for the respective pesticides could be used as the accepted standards established by the Sri Lanka Tea Board under the 'Sri Lanka (Import & Export) Regulations 1981 - Scheme for import of tea for blending and export thereafter, unless otherwise not amended by the Registrar of Pesticides in Sri Lanka and/or the Director, Tea Research Institute of Sri Lanka.

#### Name of the

Pesticide Maximum Residues Limit (MRL), mg/kg (ppm)

Brunolium Exempted
Calcium hydroxide Exempted
Chlorantraniliprole 0.02
Copper hydroxide 40 (as Cu)

Copper oxide	40 (as Cu)
Diazinon	0.05
Diuron	0.05
Fipronil	0.002
Fluopyram	0.05
Glufosinate ammonium	0.10
Glyposate	0.1
Hexaconazole	0.01
Methylisocyanate/Metam	0.02
Oxyfluorfen	0.01
Propiconazole	0.10
Sulphur	Exempted
Tebuconazole	0.05

## 8) Non-Pesticide Residues:

Name of the

Substance	Maximum Residues Limit (MRL), mg/kg (ppm)
Anthroquinone	0.01
2,6-DIPN	0.01
PAH (16 PAHs)	0.01
Gluten	0.01

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