## 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		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	int max.10 MPN/g		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.

	Name of the	Category/	MRL	MRL
	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	. <del>-</del>
10.	Glufosinate ammonium	W	0.10	.0.30
11.	Glyposate	W	2	.1
12.	Hexaconazole	F	0.05	. 0.01*
13.	Methylisocyanate/Met	tam 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.