



Technical Specifications for **CANADA SPLIT LENTIL**

Specification reference: **Split Lentil**

Version: **V1.0**

Date of issue: **27th March, 2011**

1. SCOPE

This specification applies to origin **Canada Split Lentil** purchased by WFP.

2. DEFINITION

Damaged grains include lentils which are distinctly damaged by frost, heat, weather, disease, or other causes, or are distinctly soiled or stained by nightshade, dirt, or toxic material.

Foreign materials are metallic pieces, shale, glass, dust, sand, gravel, stones, dirt, pebbles, lumps earth, clay, mud, animal filth, seedcoats, straws, weeds and other vegetable matters.

Discoloured includes Split Lentils which are distinctly blemished and / or off colour from the characteristic colour of the predominating class.

3. REFERENCE

Codex Standard for certain pulses grains (Codex Stan 171-1989, rev. 1-1995).

4. PRODUCT SPECIFICATION

4.1 General requirements

- Moisture: **12% max**
- Total damage: **2% max**
- Total foreign material: **1% max**
- Unhusked grains: **1% max**
- Broken: **2% max**
- Discoloured: **1% max**
- Cooking time: **15 minutes (no soaking)**
- Organoleptic: **Clean and bright appearance, Natural smell**
- Live insect: **Nil**

If required by recipient country, **Split Lentil** needs to be obtained from non-genetically modified varieties.

4.2 Contaminants and Toxins

Split Lentil shall not contain contaminants and toxins in amounts which may represent a hazard to human health. Specific limit of some contaminants and toxins is presented in table 1.

Table 1: Limit of contaminants and toxins

No	Contaminant and toxin	Limit
Heavy metal		
1	Arsenic (As)	0.10 ppm max.
2	Copper (Cu)	2.0 ppm max.
3	Lead (Pb)	0.10 ppm max.
4	Cadmium (Cd)	0.02 ppm max.
5	Mercury (Hg)	0.01 ppm max.
Pesticide residues		
6	Carbamate	< 10 ppb
7	Organochlorine	< 10 ppb
8	Organophosphorus	< 10 ppb
9	Pyrethroid	< 10 ppb
Toxic or noxious seeds		
10	Crotalaria (Crotalaria spp.)	Free
11	Corn cockle (Agrostemma githago L.)	Free
12	Castor bean (Ricinus communis L.)	Free
13	Jimson weed (Datura spp.)	Free
Radiation		
14	Radiation	10 Bq/Kg max.
Mycotoxins		
15	Aflatoxin (total B1+B2+G1+G2)	20 ppb max.
16	Fumosin	5 ppb max.
17	Zearalenone	100 ppb max.
18	Ochratoxin A	5 ppb max.

5. PACKAGING AND MARKING

As per contractual agreement.

6. STORING

Split Lentil must be stored under dry, ventilated and hygienic conditions.

7. SAMPLING REQUIREMENTS

Representative samples can be drawn according to international sampling method standards at the bagging section or in the warehouse.

For packed units, sampling frequency and reference method are showed in *table 2*. One laboratory samples of 10 kg is required by lot or sub-lot of 500MT maximum.

For the bulk (static and flowing), the sampling must follow the rules described in paragraphs 5.2 and 5.3 of ISO 24333-2009.

Table 2: Sampling rules

Lot or sub-lot size (MT)	Number of increment	Place of sampling	Reference
≤100	3 % of bags and minimum 50 bags (e.g. 60 increments for a lot of 100 MT, packed in 50 kg bag)	Warehouse or during production	GAFTA 124-2
101-200	3 % of bags (e.g. 120 increments for a lot of 200 MT, packed in 50 kg bag)		
201-300	3 % of bags (e.g. 180 increments for a lot of 300 MT, packed in 50 kg bag)		
301-400	3 % of bags (e.g. 240 increments for a lot of 400 MT, packed in 50 kg bag)		
401-500	3 % of bags (e.g. 300 increments for a lot of 500 MT, packed in 50 kg bag)		

7. ANALYTICAL REQUIREMENTS

The principal tests in table 3 must be performed in order to check if the quality of the **Split Lentil** meets above requirements. Additional analyses shall be defined in case of further quality assessment.

Table 3: List of compulsory tests and reference methods

No	Parameters	Recommended level	Reference methods*
1	Moisture:	12% max	ICC No 110
			ISO 712-2009
2	Total damage:	2% max	
3	Total foreign material:	1% max	
4	Unhusked grains:	1% max	
5	Broken:	2% max	
6	Discoloured:	1% max	
7	Cooking time:	15 minutes (no soaking)	
8	Organoleptic:	Clean and bright appearance, Natural smell	
9	Live insect:	Nil	Visual
10	Aflatoxin	20 ppb max	ISO 16050
11	GMO (only if required)	Negative	

* *Or equivalent*