



Technical Specifications for RICE- Brokens 100%

Commodity code: **CERRIC110**

Version: **V14.1**

Date of issue: **11 November 2014**

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1. SCOPE

This specification is applied for milled white **Rice – Brokens 100%** that WFP purchases and distributes to beneficiaries.

2. DEFINITION

Rice: means non-glutinous and glutinous rice (*Oryza sativa* L.) in whatever form.

Paddy: means rice that is not yet dehusked.

Cargo rice: (Loonzain rice, Brown rice, Husked rice) means rice that is dehusked only.

White rice: means rice that is obtained by removing bran from cargo non-glutinous rice.

Part of rice kernels: means each part of the whole kernel that is divided lengthwise in to 10 equal parts.

Yellow kernel: Yellow kernels mean rice kernels that have some parts of the kernels turn yellow obviously. This includes parboiled rice kernels that are light brown partly or wholly.

Chalky kernel: are whole or broken kernels except for glutinous rice, of which at least three-quarters of the surface has an opaque and floury appearance.

Immature kernels: are unripe and/or undeveloped whole or broken kernels.

Red kernels: are whole or broken kernels with a red-coloured pericarp covering more than one-quarter of their surface.

Broken kernels: means broken kernels that have the length less than **7.5 parts** (or 75.0%) of whole rice kernel.

Small brokens mean small broken kernels that pass through round hole metal sieve No.7.

Sieve No. 7: is round hole metal sieve with 0.79 mm. (0.031 inch) thick and with hole diameter of 1.75 mm. (0.069 inch).

Damaged kernels mean kernels that are obviously damaged as can be seen by the naked eyes due to moisture, heat, fungi, insects or other.

Foreign material: means other matter than rice. This includes rice husk and bran detached from rice kernels.

Reasonably well milled is the removal of a large amount of bran to the extent that the rice kernel has a reasonably beautiful appearance.

3. REFERENCE

Codex standard for rice CODEX STAN 198-1995

Thai Rice Standards, 1997

4. SPECIFICATION

4.1 General requirements

Rice shall be fresh, free from abnormal flavours, odours and live insects. If required by recipient country, **Rice** needs to be tested for Radiation and be obtained from non-genetically modified varieties.

4.2 Specific requirements

Rice must also comply with other requirements specified in table 1.

4.3 Contaminants

4.3.1 Heavy metals

The products covered by the provisions of this standard shall be free from heavy metals in amounts which may represent a hazard to human health.

4.3.2 Pesticide residues

Rice shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

4.3.3 Mycotoxins

Rice must not contain more than 5.0 ppb Ochratoxin A.

4.4 Hygiene

4.4.1 It is recommended that the product covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the *Recommended International Code of Practice – General Principles of Food Hygiene* (CAC/RCP 1-1969), and other Codes of Practice recommended by the Codex Alimentarius Commission which are relevant to this product.

4.4.2 To the extent possible in good manufacturing practice, the product shall be free from objectionable matter.

4.4.3 When tested by appropriate methods of sampling and examination, the product:

- shall be free from micro-organisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from micro-organisms, including fungi, in amounts which may represent a hazard to health.

5. PACKAGING AND MARKING

The below requirements are only applied for purchases of **Rice** packed in bags.

5.1 Packaging

Bags for **Rice** must comply with below requirements:

- Bags is made of woven polypropylene (PP) are to be given special food grade “ultraviolet” treatment.
- Bags have a heat cut mouth to prevent fibrillation and have sewn single folder bottom.
- Bags must be closed by double stitching with suitable thread.
- Bags must be clean, sound and free from insect, fungal infestation.
- Bags must be new, uniform, strong, fit for export and multiple handing.

- Construction of fabric must be solid to sustain harsh handling.
 - The bags of finished product must pass the drop test (after each drop, there shall be no rupture or loss of contents) following the principles of the drop test standard (EN 277, ISO 7965-2 or equivalent) with following sequence:
 - + Butt dropping: Bag is dropped from a height of 1.20m on the bottom and the top of the bag.
 - + Flat dropping: Bag is dropped from a height of 1.60m twice on one flat face and twice on the opposite flat face.
- Two percent marked bags (included in the price) must be sent with the lot.

5.2 Marking

Below information must be printed on the bags:

- Name of the product
- Net weight
- Name of supplier
- Additional marking as per contractual agreement

6. ANALYTICAL REQUIREMENTS

The principal tests in table 1 must be performed in order to check if the quality of the **Rice** meets above requirements. Additional analyses shall be defined in case of further quality assessment is required.

Table 1: List of compulsory tests and reference method

No	Tests	Requirements	Reference method (or equivalent)
1	Organoleptic quality	Natural odour, colour appearance	ISO 7301
2	Moisture	Max. 14.0 % (m/m)	ISO 7301
3	Yellow kernels	Max. 2.0 % (m/m)	ISO 7301
4	Red kernels	Max. 7.0 % (m/m)	ISO 7301
5	Chalky kernels	Max. 10.0 % (m/m)	ISO 7301
6	Immature kernels	Max. 2.0 % (m/m)	ISO 7301
7	Small brokens	Max. 5.0 % (m/m)	ISO 7301
8	Paddy kernels	Max. 30 kernels/kg	ISO 7301
9	Damaged kernels	Max. 2.0 % (m/m)	ISO 7301
10	Foreign material	Max. 0.50 % (m/m)	ISO 7301
11	Live insect	Nil	ISO 7301
12	Milling degree	Reasonably well milled	ISO 7301
13	Arsenic (inorganic)	Max. 0.2 ppm	AOAC 986.15
14	Cadmium	Max. 0.4 ppm	AOAC 999.10
15	Pesticide residues	Shown at: http://www.codexalimentarius.net/pestres/data/commodities/details.html?id=158	EU 15662
16	Ochratoxin A	Max. 5.0 ppb	AOAC 2000.3
17	Average kernel length (only if required)	As per contractual agreement	ISO 7301
18	GMO (only if required)	Negative (< 0.9 % of GMO material)	PCR
19	Radiation (only if required)	As per contractual agreement	