



Technical Specifications for

RICE- RAW

Updates:

- Testing requirements of aflatoxins total

Version: 1

Replacing Version: 14, 2014

Date of issue: 5TH July 2022

1. SCOPE

This specification is applied for **raw Rice** that WFP purchases.

2. DEFINITION

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

Paddy (raw rice) means rice that is not yet dehusked.

Purity: The amount of material of the particular raw rice in the sample. It excludes all other plant material of the rice. Purity is generally the opposite of foreign matter.

Organic matter: extraneous matter including edible and non-edible.

Inorganic matter: inorganic components, such as stone, sand and dust.

Damaged kernels: kernel showing evident deterioration due to moisture, pests, disease or other causes, but excluding heat-damaged kernels.

Heat-damaged kernels: kernel that has changed its normal colour as a result of microbiological heat.

Immature kernels: kernels are unripe or not well developed.

3. REFERENCE

Codex standard for rice CODEX STAN 198-1995

Pakistan standard specification for rice, PS: 3342-2007

Thai Rice Standards, BE 2540.

Vietnam White Rice Standards, TCVN 5644:2008 and TCVN 5643:1999

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 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.

4.4 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 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 handling.
- Bag 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	Moisture	14.0 % m/m max.	ISO 711-2009
2	Purity	95.0% m/m min.	<i>Visual examination</i>
3	Organic matter	1.5% m/m max.	<i>Visual examination</i>
4	Inorganic matter	0.15% m/m max.	<i>Visual examination</i>
5	Immature kernels	3.0% m/m max.	<i>Visual examination</i>
6	Damaged kernels	2.0% m/m max.	<i>Visual examination</i>
7	Glutinous rice	2.0% m/m max.	<i>Visual examination</i>
8	Live insect	Nil	<i>Visual examination</i>
9	Arsenic (inorganic)	Max. 0.2 ppm	AOAC 986.15
10	Cadmium	Max. 0.4 ppm	AOAC 999.10
11	Pesticide residues	Comply with https://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/commodities-detail/en/?c_id=158	EU 15662
12	Ochratoxin A	Max. 5.0 ppb	AOAC 2000.3
13	Average grain length (<i>only if required</i>)	As per contractual	<i>Visual examination</i>
14	GMO (<i>only if required in the contract</i>)	Negative (< 0.9% of GMO material)	PCR
15	Aflatoxins Total ¹	Max. 20 ppb	ISO 16050

¹ WFP or any appointed agent/inspection company will take samples of the Commodity from the Seller and will carry out, through a laboratory of its choice, an analysis of the level of Total Aflatoxins contained in the Commodity. The maximum acceptable limit is 20 ppb. Any analysis result above this limit will be binding on the Seller and, as the case may be, will entitle WFP to reject the Commodity before or at the time of delivery, which must then be entirely replaced by the Seller at its own risks and costs. All additional expenses and/or consequences resulting from non-compliance of the Commodity with the aforementioned maximum authorized Total Aflatoxins level will be borne by the Seller.