



## Technical Specifications for

# THAI and CAMBODIA WHITE RICE 35%

Specification reference: **White Rice 35%**

Version: **2.0**

Date of issue: **30 August, 2011**

## 1. SCOPE

This specification based on “Thai Rice Standards, 1997” is applied for White Rice – 35%, originated in Thailand and Cambodia 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.

**Whole kernels** mean rice kernels that are in whole condition without any broken part, including the kernels that have length as from 9 parts onward.

**Head rice** means broken kernels whose lengths are more than those of **Brokens** but have not reached the length of the whole kernel. This includes slits kernels that retain the area as from 80% of the whole kernel.

**Brokens** means broken kernels that have the length as from 2.5 parts but have not reached the length of Head rice. This includes splits kernels that retain the area less than 80% of the whole kernel.

**Small brokens** mean small broken kernels that pass through round hole metal sieve No 7 (sieve that is 0.79mm thick and with hole diameter of 1.75mm).

**Red kernels** mean rice kernels that have red bran covering the kernels wholly or partly.

**Yellow kernels** mean rice kernels that have some parts of the kernels turn yellow obviously.

**Chalky kernels** mean non-glutinous rice kernels that have an opaque area like chalk covering the kernels as from 50% onward.

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

**White glutinous rice** means rice that is obtained by removing bran from Cargo glutinous rice

**Under milled kernels** mean milled rice kernels that have the milling degree below that specified for each grade of rice.

**Undeveloped kernels** mean kernels that do not develop normally as should be, and are flat without starch.

**Immature kernels** mean rice kernels that are light green, obtained from immature paddy.

**Other seeds** mean seeds of other plants than rice kernels.

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

**Milling degree** means the degree to which the rice is milled.

**Ordinarily milled** is the removal of some portions of bran only.

### 3. SPECIFICATION

Rice shall be fresh, free from abnormal flavours, odours, alive insects. The main requirements for rice are:

Moisture	14.0% max
Short grain ( $\leq 6.2$ mm)	50.0% max
Whole kernels	32.0 % min
Total Broken ( <b>&lt;5 parts, including Broken not passing through sieve No. 7 and Small broken</b> s)	40.0 % max
Small broken	2.0 % max
Red and/or Under milled kernels	7.0 % max
Yellow kernels	1.0 % max
Chalky kernels	10.0 % max
Damaged kernels	2.0 % max
White glutinous rice	2.0 % max
Undeveloped, Immature kernels, Other seeds and Foreign matter ( <i>singly or combined</i> )	2.0% max
Paddy (grains per 1 kg)	20 grains max
Milling degree	Ordinarily milled

In addition, **Rice** shall not contain other contaminants and toxins in amounts which may represent a hazard to human health.

### 4. ANALYTICAL REQUIREMENTS

Table 1: List of compulsory tests and reference method

No	Parameters	Limit	Method *
1	Moisture	14.0% max	ISO 712-2009
2	Short grain ( $\leq 6.2$ mm)	50.0% max	ISO 7301-2002
3	Whole kernels	32.0 % min	ISO 7301-2002
4	Total Broken ( <b>&lt;5 parts, including Broken not passing through sieve No. 7 and Small broken</b> s)	40.0 % max	ISO 7301-2002
5	Small broken	2.0 % max	ISO 7301-2002
6	Red and/or Under milled kernels	7.0 % max	ISO 7301-2002
7	Yellow kernels	1.0 % max	ISO 7301-2002
8	Chalky kernels	10.0 % max	ISO 7301-2002
9	Damaged kernels	2.0 % max	ISO 7301-2002
10	White glutinous rice	2.0 % max	ISO 7301-2002
11	Undeveloped, Immature kernels, Other seeds and Foreign matter ( <i>singly or combined</i> )	2.0% max	ISO 7301-2002
12	Paddy (grains per 1 kg)	20.0 grains max	ISO 7301-2002
13	Milling degree	Ordinarily milled	ISO 7301-2002
14	Organoleptic	Natural state, smell and colour	Visual, Sensorial
15	Alive insect	Nil	ISO 6639-1, 2, 3 and 4

\* Or equivalent