

MILLET GRAINS

SCOPE

This standard is concerned with whole and hulled millet grains intended for human consumption from millet (*Pennisetum glaucum* L.)

DEFINITIONS

Whole grains: are millet grains obtained from threshing and without other mechanical processing

Hulled grains: They are millet grains from which the outer parts is removed by proper methods, estimated between 20 -22% of the weight of the whole grain is removed using mechanical treatment (for example: simple scraping)

REQUIREMENTS

General Requirements

The general requirements of millet grains shall be as follows:

- They shall be of the same color which may be brown, white or green.
- Free from foreign odor and taste.
- Free from live and dead insects, their parts and phases, and any visible fungal growth.
- Sound, clean, and free from dust and organic impurities (such as bird, rat excrement or insects, etc.) and metal pieces.
- The degree of grain peeling shall not exceed 22% of the grain weight

TECHNICAL REQUIREMENTS

Millet grain should have the properties shown in the table below



- 1 The level of radioactive contamination should not exceed 10 Bq/kg
- 2 Maximum limit of mycotoxins should not exceed the permitted limits in the Sudanese standard No. (MSDP 2006/28/42 Pollution with Mycotoxins - Grains and their products)
- 3 The level of microbiological limits in millet should not exceed the maximum permissible according to what is stated in the Sudanese Standard Specification No. (MSDS 2007/2013 microbiology Borders of cereals)

PACKAGING

Millet grains should be packed in sound, durable and clean packages that do not lead to contamination or alteration of product properties

LABELLING

In addition to what was stated in the Sudanese Standard No. MSDS 2889/2011, the data on

The packaging or preamble of foodstuffs (must be indicated on the package) on the identification papers in

(Bulk grain condition) the following data:

PRODUCT NAME AND TYPE	COUNTRY OF ORIGIN	PRODUCTION DATE (MONTH / YEAR HARVEST DATE MONTH / YEAR)	NET WEIGHT IN KILOGRAMS
WHOLE MILLET/HUSKED MILLET			
NAME AND ADDRESS OF THE PRODUCER AND TRADE MARK (IF ANY)		VALIDITY PERIOD	

STORAGE

The product should be stored in clean and well-ventilated places away from sources of pollution, humidity, and no toxic substances, pesticides, herbicides or pesticides were previously stored in it, Fungal or odorous substances.

Millet grains should be stored in places that protect them from damage and infestation by insect pests and rodents.

The storage means should comply with what is stated in the Sudanese Standard No. (MSDS 2007/3891 food storage)

VALIDITY PERIOD

The shelf life of millet grains should not exceed

-Whole millet grains (18 months)

-Hulled millet (3 months)

SAMPLING

Sampling is carried out according to the Sudanese Standard No. (MSDS 2007/1005 sampling grains)

TESTING

The properties of millet grains are examined according to the test methods included in the table (Item No. 1-2-3).

The weight of a thousand grains: 250 grains are randomly counted and weighed, and the weight product is multiplied by 4

To be the weight of a thousand grains. (The weight of a thousand grains = the weight of 250 grains × 4).

TRANSPORT

1- The product should be transported under good conditions that protect it from weather changes, insect infestation, rodents, contamination and damage.

2- Means of transport shall be sound and clean to maintain quality of the product and its safety. It shall not have been used before for transportation of pesticides, herbicides or any other materials that can affect the quality of the product.

REFERENCES

- 1 - Gulf Specification GSM 2002/1364 (millet grains).
- 2 - Specification for Wheat Grains MSDS 2011/43 (Wheat Grains).