

A Simplified UGANDA SESAME STANDARD



WHY THE SESAME STANDARD

The Sesame standard will greatly improve the understanding of sesame-standard, improve the quality of the processed sesame products, reduce the risk of rejection by exporter/importers and also improve returns to all those in the market value chain:

Farmers will realize better prices due to improved quality sesame oil seed. High quality oil seeds always attract good prices in the local, National and Regional market. The post-harvest losses will greatly reduce once the standard is implemented as the prices for quality oil seeds are attractive.

The farmers can also use cooperative system to acquire loans for purchase of farm inputs and other essentials, since they can store sesame oil seeds until the market prices stabilize.

Traders comprising of local, exporters and importers, will be able to get high quality sesame oil seeds that meet National and International requirements, with reliable supplies from farmers. Whenever the sesame oil seeds meet the standard requirements and always available in large volumes, it will always attract good buyers and good prices due to high quality.

Processors of sesame seeds adding value to the oil seeds will always be assured of constant supply of quality sesame oil seeds that meet standard requirements, due to high quality oil seeds, the final products will always meet other standards requirements.

Consumers as the end users will always consume safe products from sesame oil seeds as it will comply with acceptable levels of contaminants such as: pesticide residues, aflatoxin, salmonella and heavy metals. The product will always meet the acceptable microbiological limits in sesame mention in the Uganda sesame standard.

NB: To achieve high quality standard of sesame oil seeds and other value added products, with recommended international test methods, eighteen standards have be referenced to, fourteen of these standards are used by Uganda National Bureau of Standards (UNBS) to determine the standards requirement and four of these standards are suppose to used by farmers, traders and processors.

The following standards apply to farmers, traders and processors: EAS 39, Code of practice for hygiene in the food and drink manufacturing industry. US 738, General standard for contaminants and toxins in food and feed. US EAS 38, Labeling of pre-packaged foods-General requirements and US EAS 156-1, Woven bags from natural fibers-Specification-Part 1: Woven bags for cereals.

The following standards numbers are used by UNBS to determine standard requirements of Sesame grains are: US ISO 542, US ISO 605, US ISO 659, US ISO 660, US ISO 665, US ISO 2171, US ISO 5983-1, US ISO 5985, US ISO 6579, US ISO 6869, US ISO 7251, US ISO 16050, US ISO 16634-1 and US ISO 21527-2.

GENERAL QUALITY REQUIREMENTS

Sesame shall be free of any flavours and odours. It shall be clean wholesome and have a colour characteristic of the variety.

Specific requirements for Sesame

S/N	Characteristic	Level		
		Grade 1	Grade 2	Grade 3
i.	Crude protein on dry matter basis , % m/m, min.	15	15	15
ii.	Moisture content, % m/m, max.	7.0	7.0	7.0
iii.	Acid insoluble ash, % m/m, max.	2.0	2.0	2.0
iv.	Filth, % m/m, max.	0.1	0.1	0.1
v.	Inorganic extraneous / foreign matter, % m/m, max.	0.1	0.2	0.2
vi.	Extraneous/foreign matter, % m/m, max.	0.1	2.00	2.00
vii.	Damaged grain, % m/m, max.	1.0	2.00	3.0
viii.	Acid value of extracted oil, max	2	4	6
ix.	Oil content (on moisture free basis), % m/m, min.	52	48	45
x.	Shrivelled and immature , percent by weight, max	2.00	4.00	6.00

For the purposes of this standard, the following terms and definitions shall apply.



sesame

edible seeds of the sesame plant, which are used whole or have the oil extracted



foreign/extraneous matter

organic materials other than the sesame grains and other grains; and inorganic materials



organic foreign/extraneous matter

material consisting of husks, straws, weeds, and other grains which does not include filth.



inorganic foreign/extraneous matter

material which includes metallic pieces, dust, sand, gravel, stones, dirt, pebbles, lumps of earth, clay, and mud

For the purposes of this standard, the following terms and definitions shall apply.



filth

impurities of animal origin, including dead insects



food grade materials

any material which when comes in contact with food or in the area near food is unlikely to contaminate food with harmful materials



damaged grains

broken seed of sesame mainly due to processing



shrivelled/immature

grains which are underdeveloped, thin and papery in appearance

Hygiene

Sesame shall be produced, prepared and handled in accordance with US 1628.

Sesame shall be free from microorganisms in amounts which may represent a hazard to health and shall not exceed the limits specified in Table 3.



Weights and measures

Sesame shall be packaged in accordance with the Weights and Measures requirements of the destination country. It is recommended by International Labour Organization (ILO) to package in the 50 kg bag or container.

Packaging

Sesame shall be packaged in food grade materials that will safeguard the hygienic, nutritional and organoleptic qualities of the product.



Labelling

In addition to the requirements of US 1628, the following labelling requirements shall apply and shall be legibly and indelibly marked:



- a) product name as , "Sesame";
- b) name and physical address of the producer, packer, importer/distributor;
- c) net weight in kilograms;
- d) country of origin;
- e) lot/batch/code number;
- f) statement, "Food for Human Consumption", shall appear on the package;
- g) storage instructions as "Store in a cool dry place away from contaminants";
- h) instructions on disposal of used package;
- i) crop year;
- j) packing date; and
- k) "Best before date".

Sampling

Sampling shall be carried out in accordance with US ISO 542.

CONTAMINANTS

Pesticide residues

Sesame shall conform to those maximum residue limits for pesticides established by the Codex Alimentarius Commission for this commodity



Table 2 — Heavy metal contaminants in sesame

S/N	Heavy metal	Limits, max. mg/kg
i.	Cadmium	0.1
ii.	Lead	0.2
iii.	Arsenic	0.1

Aflatoxin

The maximum content of aflatoxins in sesame when determined in accordance with the method described in US ISO 16050 shall not exceed 5 µg/kg for aflatoxin B1 and 15 µg/kg for total aflatoxins



Table 3 — Microbiological limits in sesame

S/N	Microorganisms	Limits
i.	Yeasts and moulds, per g, max.	10 ⁴
ii.	E. coli, per g, max.	absent
iii.	Salmonella	absent

Salmonela

Sesame shall conform to those maximum micro-organisms limits listed in Table 3.



Table 3 — Microbiological limits in sesame

S/N	Microorganisms	Limits
i.	Yeasts and moulds, per g, max.	10 ⁴
ii.	E. coli, per g, max.	absent
iii.	Salmonella	absent

Heavy metals

Sesame shall conform to those maximum residue limits for heavy metals listed in Table 2.



Acknowledgement

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Products that conform to Uganda standards may be marked with Uganda National Bureau of Standards (UNBS) Certification Mark shown in the figure below.

The use of the UNBS Certification Mark is governed by the Standards Act, and the Regulations made thereunder. This mark can be used only by those licensed under the certification mark scheme operated by the Uganda National Bureau of Standards and in conjunction with the relevant Uganda Standard. The presence of this mark on a product or in relation to a product is an assurance that the goods comply with the requirements of that standard under a system of supervision, control and testing in accordance with the certification mark scheme of the Uganda National Bureau of Standards. UNBS marked products are continually checked by UNBS for conformity to that standard.

Further particulars of the terms and conditions of licensing may be obtained from the Director, Uganda National Bureau of Standards.





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