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ARABIC GUM

HASHAB
ACACIA SENEGAL

SCOPE

This Sudanese standard applies to Cleaned Grade gum arabic from Acacia senegal var. senegal

SYNONYMS

Gum arabic.
hashab and
Kordofan gurn

DEFINITIONS

Gum arabic Cleaned gum is obtained from the stems and branches CT Acatia senegal var. seneoal (L). Willdenow (fam. legurminosae). It consists mainly of salts of an acidic arabino-galactan protein complex which on hydrolysis yields galactose, arabinose, rhamnose, glucuronic acid and 4- methoxy glucuronic acid

DESCRIPTION

Medium to small size modules and tears and broken piece of gum Arabic

FUNCTIONAL USES

Emulsifier, stabilizer, thickening and encapsulating agent and some other general and technical applications

STANDARD REQUIREMENTS

PHYSICAL CHARACTERISTICS

Solubility	it's highly soluble in water, gives up to 50% solution and insoluble in ethanol
Hydrolysis products	Passes test

CHEMICAL CHARACTERISTICS

LOSS ON DRYING
NOT MORE THAN 15% (105C, 5H)

TOTAL ASH
NOT MORE THAN 4%.

NITROGEN CONTENT
0.24 TO 0.41%

PROTEIN CONTENT
1.58 TO 2.7% (N X 6.6)

ARSENIC
NOT MORE THAN 3MG/KG

LEAD
NOT MORE THAN 10MG/KG

HEAVY METALS
NOT MORE THAN 40MG/KG

STARCH AND DEXTRIN
PASSES TEST

SPECIFIC ROTATION
(X)1 D (-22°) TO (-34°)

TANNIN – BEARING GUM
FORMATION OF A BLACK PRECIPITATE INDICATES THE PRESENCE OF TANNIN

MICROBIOLOGICAL CRITERIA

1- Salmone//a sp.	Absent/g
2- E. coli.	Absentig

STORAGE

Preferably to be stored under clean, cool and dry conditions, in a properly constructed warehouse

PACKAGING

Multi-layered paper bag lined with polyethylene.
capacitv 50 — 25 kg

LABELLING

Should be clear and indicates

PRODUCT NAME	PRODUCING COMPANY	PRODUCT GRADE	NET WEIGHT (KG)	STORAGE CONDITIONS
ARABIC GUM TALHA GUM	BRAND NAME		KG	

SHELF LIFE

YRS

Unlimited under the appropriate storage conditions mentioned in section 9

TESTING

Sampling and testing should be carried out according to SDS 145, 146, 147. 148, 149. 150, 151, 152, 153. 154, 155, 166. 157,158: 159 and 160.

*test carried out on dry bass

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TECHNICAL COMMITTEE

ORGANIZATIONS PARTICIPATING IN THE TECHNICAL COMMITTEE NO. 4 ARE REPRESENTED BY

1. UNIVERSITY OF KHARTOUM.
2. FOOD RESEARCH CENTER.
3. THE GUM ARABIC COMPANY.
4. KHARTOUM GUM ARABIC PROCESSING COMPANY.
5. MINISTRY OF INDUSTRY AND INVESTMENT.
6. MINISTRY OF AGRICULTURE AND FORESTRY — MEMBER NOT NOMINATED
7. SUDANESE STANDARD AND METROLOGY ORGANIZATION

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ARABIC GUM KIBBLED GRADE

SCOPE

This Sudanese standard applies to kibbled gum arabic from Acacia senegal var. senegal

SYNONYMS

Gum arabic, hashab and Kordofan gum

DEFINITIONS

Gum arabic kibbled gum is the crushed form of the dried exudate obtained from the stems and branches of Acacia senegal var. Senegal (L) Willdenow (fam. leguminosae).It consists mainly of salts of an acidic arabino-galactan protein complex which on hydrolysis yields galactose, arabinose, rhamnose, glucuronic acid and 4- methoxy glucuronic acid

DESCRIPTION

Gum arabic (Acacia senega/) kibbled form
Mesh size range from 8 to 0.5 mm

FUNCTIONAL USES

Emulsifier, stabilizerm thickening and encapsulating agent and some other general and technical applications

STANDARD REQUIREMENTS

PHYSICAL CHARACTERISTICS

Solubility	It is highly soluble in water, gives up to 50% solution and insoluble in ethanol
Hydrolysis products	Passes test

CHEMICAL CHARACTERISTICS

LOSS ON DRYING
NOT MORE THAN 15% (105C, 5H)

TOTAL ASH
NOT MORE THAN 4%.

NITROGEN CONTENT
0.24 TO 0.41%

PROTEIN CONTENT
1.58 TO 2.7% (N X 66)

ARSENIC
NOT MORE THAN 3MG/KG

LEAD
NOT MORE THAN 10MG/KG

HEAVY METALS
NOT MORE THAN 40MG/KG

STARCH AND DEXTRIN
PASSES TEST

SPECIFIC ROTATION
[A]ID (-22°) TO (-34°)

TANNIN – BEARING GUM
PASSES TEST

MICROBIOLOGICAL CRITERIA

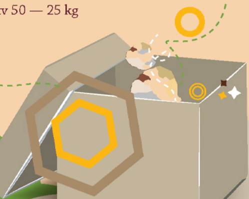
1- Salmone//a sp.	Absent/g
2- E. coli.	Absent/g

STORAGE

Preferably to be stored under clean, cool and dry conditions: in a properly constructed warehouse

PACKAGING

Multi-layered paper bag lined with polyethylene.
capacitv 50 — 25 kg



LABELLING

Should be clear and indicates

PRODUCT NAME	PRODUCING COMPANY	PRODUCT GRADE	NET WEIGHT (KG)	STORAGE CONDITIONS
ARABIC GUM TALHA GUM	BRAND NAME		KG	

SHELF LIFE

YRS

Unlimited under the appropriate storage conditions mentioned in section 9

TESTING

Sampling and testing should be carried out according to SDS 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157,158, 159 and 160.

*Test carried out on dry basis

Afro Seeds

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6. MINISTRY OF AGRICULTURE AND FORESTRY — MEMBER NOT NOMINATED
7. SUDANESE STANDARD AND METROLOGY ORGANIZATION

Afro Seeds

ARABIC GUM

GUM TALHA

SCOPE

This Sudanese standard applies to the dry exudate obtained from the trees of Acacia seyal var. seyal

SYNONYMS

Acacia seya/gum

DEFINITIONS

Gum talha is the dry exudate obtained from the stems and branches of Acacia seyal var. seyal, Del. (fam.Leguminosae). It consists mainly of salts of an acidic arabino-galactan protein complex which on hydrolysis yields galactose, arabinose, rhamnose, glucuronic acid and 4-O- methoxy glucuronic acid

DESCRIPTION

Gum talha is a yellowish-brown solid. On drying, its nodules and tears are brittle and can easily break into siftings and dust. It is odourless and has a stringent taste. It may contain extraneous materials such as sand and pieces of bark

COMMERCIAL GRADES

- Spray Dried Grade, SDS, No. (2895).
- Clean Grade, SDS, No. (2896).
- Kibbled Grade, SDS, No. (2892).
- Mechanical Powder Grade, SDS, No. (2893).
- Dust Grade, SDS, No. (2894)

FUNCTIONAL USES

Emulsifier, stabilizer, thickening and encapsulating agent, and some other general and technical applications

CHARACTERISTICS

IDENTIFICATION

1- Solubility It is highly soluble in water, gives up to 50% solution and insoluble in ethanol.
2- Hydrolysis products Passes test.
3- Specific rotation {.}D 25C (+ 45) to (+ 60)

PURITY

LOSS ON DRYING
NOT MORE THAN 15 % (105C, 5HTS)

TOTAL ASH
NOT MORE THAN 4%.

NITROGEN CONTENT
0. 106 TO 0.156%

PROTEIN CONTENT
0.7 TO 1.00/0(N X 6.6)

ARSENIC
NOT MORE THAN 3MG/KG

LEAD
NOT MORE THAN 10MG/KG

HEAVY METALS
NOT MORE THAN 40MG/KG

STARCH AND DEXTRIN
PASSES TEST

TANNIN – BEARING GUM
FORMATION OF A BLACK PRECIPITATE INDICATES THE PRESENCE OF TANNIN

MICROBIOLOGICAL CRITERIA

1- Salmone//a sp. Negative per test
2- 7@.2 E.coli Negative in lgm

STORAGE

Should be stored under clean, cool and dry conditions, in a properly constructed warehouse

PACKAGING

Jute, polypropylene or polyethylene lined multi-layer paper bags of 25 - 50kg capacity, or as agreed, upon, between customer and supplier

LABELLING

Should be clear and indicates

PRODUCT NAME	PRODUCING COMPANY	PRODUCT GRADE	CODE NUMBER
ARABIC GUM TALHA GUM	BRAND NAME		ISBN 978-80-87049-09-9 9 788087 049099
COUNTRY OF ORIGIN	**SEASON OF PRODUCTION**	**NET WEIGHT (KG)**	**STORAGE CONDITIONS**
		KG	

SHELF LIFE

YRS

Unlimited under the appropriate storage conditions mentioned in section 10

SAMPLING

Sampling should be carried out according to Sudanese standard SDS No. 145

TESTING

1- Testing should be carried out according to Sudanese standards SDS No. 146, 147, 148, 149, 152, 153, 154, 155, 157, 158 and 528.

2- Test carried out on dry weight basis

3-"Nitrogen conversion factor (NCF) according to Anderson, D.M.W. (1986)

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