

Gum Olibanum

SCOPE

This Sudanese standard applies to the dry exudate from *Boswellia papyrfera* (Del.).

SYNONYMS

Amyris papyrfera, Frankincense, Oleogum, resin, Luban

DEFINITION

Gum olibanum is the dry exudate obtained from the stems and branches of *Boswellia papyrfera* (Del.) tree (fam. Burseraceae). 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 and a trace of L.fucose

DESCRIPTION

Gum olibanum is a greenish-yellow solid in the form of irregular nodules and fragments which on pressing form a slightly plastic mass. Gum olibanum has a characteristic pleasant odour and bitter taste. It may contain extraneous materials such as sand and pieces of bark

COMMERCIAL GRADES

GRADE	PARTICLE SIZE
NAGAWA	10 MM
GRADE	10 - 5 MM
GRADE	5 - 2.5 MM
SOKSOKANIA	2.5 MM

FUNCTIONAL

It is used as a fixative for perfumes, in soap

Uses manufacture, in folkloric medicine, an incense in holy places and as an insecticide

CHARACTERISTICS

IDENTIFICATION

SOLUBILITY

Partially dissolves in distilled water forming a milky emulsion, insoluble in ethanol

LOSS ON DRYING

Less than 10%(105 C, 5hrs)

TOTAL ASH

Less than 2%

NITROGEN

Content 0.26 to 0.31%

OIL CONTENT

Content Not less than 2%

HEAVY METALS

Not more than 40 mg/kg

PURITY

MICROBIOLOGICAL CRITERIA

SALMONELLA SP

Negative per test

ECOLI

Negative in 1gm

TANNIN BEARING GUMS

Formation of a black precipitate indicates presence of tannin

PACKAGING

Multi-layer paper bag lined with polyethylene, capacity of 50 - 25 kg, or as agreed, upon, between customer and supplier

LABELLING

Labelling Should be clear and indicates

PRODUCT NAME	PRODUCT GRADE	DATE OF PRODUCTION & EXPIRATION (MONTH/YEAR)	CODE
GUM OLIBANUM		DATE	ISBN 978-80-87069-09-9 9 788087 049099
COUNTRY OF ORIGIN	PLACE OF MANUFACTURE	NET WEIGHT (KG)	PRODUCING COMPANY
		KG	BRAND NAME

STORAGE

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

SHELF LIFE

2 YRS

Two years under the appropriate storage conditions mentioned in section 10.

SAMPLING

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

TESTING

Testing should be carried out according to Sudanese standards SDS No.146, 147,148, 149,152,153, 154, 155, 157, 158 and 528. Test carried out on dry weight basis.

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

REFERENCES

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- Mustafa, G.I.(1997). *Physico-Chemical Study on Cleo-Gums from Sudan*. MScG. Thesis, University of Khartoum, Sudan.
- Sahni, K. C.(1968). "Important Trees of the Northern Sudan". Forestry Research and Education Center, Khartoum FAO/UNDP