

## GUM GHATTI

SYNONYMS	
<b>DEFINITION</b>	A dried gummy exudation obtained from <i>Anogeissus latifolia</i> Wall. (family <i>Combretaceae</i> ) consisting mainly of a calcium salt (may on occasions occur as a magnesium salt) of high molecular weight polysaccharide which on hydrolysis yields arabinose, galactose, mannose, xylose and glucuronic acid.
C.A.S. number	9000-28-6
Formula weight	Approximately 90% of the product is water soluble, and this portion has a molecular weight of about 12,000 as determined by osmotic pressure measurements.
<b>DESCRIPTION</b>	The unground product occurs in amorphous tears of various sizes or in broken irregular pieces; light to dark brown; available commercially also in the form of grey to reddish-grey powder; little or no odour. Items of commerce may contain extraneous materials such as pieces of bark which must be removed before use in food.
<b>FUNCTIONAL USES</b>	Thickening agent, stabilizer
<b>CHARACTERISTICS</b>	
<b>IDENTIFICATION</b>	
<u>Solubility</u>	When 1 g is dispersed in 5 ml of water it forms a viscous, adhesive mucilage; insoluble in ethanol
<u>Gum constituents</u>	Proceed as directed under <i>Gum Constituents Identification</i> using the following as reference standards: arabinose, galactose, mannose, glucuronic acid and xylose. Arabinose, mannose, glucuronic acid and xylose should be present.
<u>Optical rotation</u>	A 1 in 50 solution of the sample filtered through diatomaceous earth is levorotatory
<u>Precipitate formation</u>	To 10 ml of 1 in 100 solution of the sample (filter through diatomaceous earth if necessary) add 1 ml of Million's TS. A fine precipitate is formed. To 5 ml of 1 in 100 solution of the sample (filter through diatomaceous earth if necessary) add 0.2 ml of dilute lead subacetate TS. A small or no

	<b>precipitate is formed, but an opaque flocculent precipitate is produced upon the further addition of 0.5 ml of ammonia TS.</b>
<b>PURITY</b>	
<b><u>Loss on drying</u></b>	<b>Not more than 14% (105°, 5 h)</b>

