

THE PAPAIN GRADING AND MARKING RULES

1. **Short title commencement and application. -** (2) In addition to the above, the following
 - (1) These Rules may be called the Papain Grading and Marking rules, 1979.
 - (2) They shall come into force on the date of their particulars shall also be clearly and indelibly marked on each container namely:-
 - (a) Date of packing in code or plain letter, publication in the Official Gazette.
 - (b) batch number,
 - (3) They shall apply to papain prepared in India from papaya latex of unripe papaya fruits produced in India.
 - (c) Net weight,
 - (d) place of packing,
 - (e) any other particulars as required by the Agricultural Marketing Adviser from time to time
2. **Definitions.-** In these rules, unless the context otherwise requires,-
 - (a) "Agricultural Marketing Adviser" means the Agricultural Marketing Adviser to the Government of India.
 - (b) "Schedule" means a Schedule appended to these
 - (3) An authorised packer may, after obtaining the prior approval of the Agricultural Marketing Adviser, on a container in a manner approved by the said officer, provided that the private trade mark does not represents quality or grade of papain different from the indicated by the grade designation mark affixed to the container in accordance with these rules.
3. **Grade designations:-** The grade designation to indicate the quality of papain shall be as set out in column 2 of Schedule, II and III.
4. **Definitions of Quality.-** The quality of Papain indicated by the respective grade designation shall be as set out against each grade designation in columns 2 to 11 of Schedule II and III.
5. **Grade designation Marks.---** The grade designation mark shall consist of either :-
 - (a) a design incorporating the number of the certificate of authorisation the word "Agmark" and the figure of the rising sun with the words "Produce of India" and resembling the one as set out in Schedule I, addition to the conditions specified in rule 4 of the General Grading and Marking Rules, 1937, the following shall be special conditions of every certificate of authorisation issued for the purpose of these rules namely:-
 - (II) a label specifying the grade approved by the Agricultural Marketing Adviser and bearing a design consisting of an outline map of India with the word "Agmark" and the Figure of the rising sun with words "Produce of India" and resembling the one as set out arrangements for testing papain as the Agricultural Marketing Adviser by the Agricultural Marketing Adviser may specify by general or special order from in Schedule I.
6. **Method of marking** such
 - (1) The grade designation mark shall be securely affixed to or printed on each container in a manner approved by the Agricultural Marketing Adviser.
7. **Method of packing. -** Papain shall be packed in polythene bottles or packages or galvanized tin in 150 grammes, 500 grammes, 1 Kg. 5 Kgs. And 50 kgs. Packages, which may invariably be packed either in corrugated boxes or wooden crates or in such other manner as may be approved by the Agricultural Marketing Adviser :-
8. **Special conditions of certificate of authorisation.-** In
 - (1) An authorised packer shall make such time to time.
 - (2) An authorised packer shall provide

SCHEDULE I

[See Rule 5 (i)]

Grade Designation mark

1.Design for the grade designation mark

II- Design for the grade designation mark

(See Rule 5 (ii))



SCHEDULE II

(See Rules 3 and 4)

Grade designation and definition of quality of
Crude Papain

Grade designation	Moisture ture, percent by weight maxi- mum	Total Nitro- gen, percent mini- mum	True protein nitrogen, percent mini- mum	Total ash content, percent by weight Maxi- mum	Acid insolu- ble ash, percent by weight Maxi- mum	Alcohol soluble extract, percent by weight Maxi- mum	Ether Soluble extract, percent by weight Mini- mum	Proteo- tytic activity (ml of N/10 NaoH) Mini- mum	Sulphur dioxide, maxi- mum	General Characteristics
1	2	3	4	5	6	7	8	9	10	11
Standard	9.0	9.0	50% of total Nitrogen	16.0	0.7	20.0	8.0	6.0	3000 ppm.	The product in flakes or in powder form shall be prepared by drying, either in sun or in mechanical driers, the whole latex or unripe papaya fruits (Carica papaya Linn) free from insect or fungal attack. The colour of the product shall vary from light brown to brown. The material shall be free from off odour and objectionable smell other than the characteristic odour of papain. The material shall be free from starch, sugar and any other ingredient which is not natural constituent of papain. The material shall also be practically free from extraneous matter such as sand, grit, leaves and stalks of the plant. The material may contain sulphur-dioxide mixed either in the form of sodium or potassium salts.

SCHEDULE III

(See Rules 3 and 4)

Grade designation and definition of quality of compounded Papain

Grade designation	Moisture, percent by weight maximum	Total Nitrogen, percent minimum	True protein nitrogen, percent minimum	Total ash content, percent by weight Maximum	Acid insoluble ash, percent by weight Maximum	Alcohol soluble extract, percent by weight Maximum	Ether Soluble extract, percent by weight Minimum	Proteolytic activity (ml of N/10 NaoH) Minimum	Sulphur dioxide, maximum	General Characteristics
1	2	3	4	5	6	7	8	9	10	11
Standard	6.0	2.0	50% of total Nitrogen	5.0	0.2	10.0	2.0	4.5	3000 ppm.	The product in powder form shall be prepared from crude, papain by diluting the product with suitable diluents in order to bring down its proteolytic activity. The colour of the product shall vary from Creamy white to brown. The material shall be free from off-odour and objectionable smell other than the characteristic odour of papain. The material shall also be practically free from extraneous matter such as sand, grit, leaves and stalks of the plant. The material may contain Sulphur-dioxide mixed either in the form of sodium or potassium salts.