



**PRODUCT MANUAL FOR
MUSTARD AND RAPE SEED OILCAKE AS LIVESTOCK FEED INGREDIENT
ACCORDING TO IS 1932 : 1986**

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	Product	:	IS 1932 : 1986
	Title	:	Mustard and Rape Seed Oilcake as Livestock Feed Ingredient
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	No specific requirement
b)	Grouping guidelines	:	Licence for IS 1932 : 1986 to be endorsed separately for the each type and grade.
c)	Sample Size	:	500gms
3.	List of Test Equipment	:	Please refer ANNEX – <u>A</u>
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – <u>B</u>
5.	Possible tests in a day:		
	(i) Description/Visual appearance (ii) Moisture Content (iii) Crude Protein (iv) Total Ash Content		
6.	Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 1932 : 1986 with the following scope:		
	Name of the product	Mustard and Rape Seed Oilcake as Livestock Feed Ingredient	
	Type	a) Hydraulic or Expeller or Rotary Pressed Oilcake; b) Ghani or Kolhu Pressed Oilcake.	
	Grades	Hydraulic or expeller or rotary pressed oilcake shall be of following two grades a) Grade HF (High Fat) or b) Grade LF (Low Fat)	

ANNEX - A
TO PRODUCT MANUAL
FOR MUSTARD AND RAPE SEED OILCAKE AS LIVESTOCK FEED INGREDIENT
ACCORDING TO IS 1932 : 1986

LIST OF TEST EQUIPMENT

Major test equipment required to test as per the Indian Standard

Sl. No.	Test Equipment	Tests used in with Clause Reference
1.	Analytical balance-0-200g, LC 0.01 mg, 1.00-mm IS Sieve/ ASTM Sieve 18/ BS Sieve 16 or Tyler Sieve 16, Stopped glass bottle, Hot air oven (capable of operating at 100°C), Aluminium Dish (Dia 50mm min, Depth 40mm), Desiccator.	Moisture Cl. 4.2, Table 1 {clause 4 of 7874 (Part 1)}
2	Kjeldahl Flask - 500 ml capacity, Distillation Assembly, Conical flask, Methyl red indicator, Potassium Sulphate or Anhydrous Sodium Sulphate, Copper Sulphate, Concentrated Sulphuric Acid- r.d. 1.84, Sodium Hydroxide Solution, Standard Sodium Hydroxide Solution - 0.25 N, Std Sulphuric acid (0.5N), Boric Acid Solution, Magnesium Oxide - carbonate free. Analytical balance 0-200g, LC 0.01 mg, Round bottom flask, pumice stone	Crude Protein Cl. 4.2, Table 1 {Clause 5 of IS 7874 (Part 1)}
3	Petroleum Ether - of boiling range 40°C to 60°C, Hexane, Food Grade, Weighing balance, Soxhlet or other suitable extractor, Desiccator, Analytical balance 0-200g, LC 0.01 mg.	Crude Fat Cl. 4.2, Table 1 {clause 7 of IS 7874 (Part 1)}
4	Sulphuric Acid - 0.255 N, Sodium Hydroxide Solution- 0.313 N, Weighing balance 0-200g, LC 0.01 mg, Soxhlet or other suitable extractor, Dessicator, Conical flask- 1 litre capacity, Water bath, Fine linen, Gooch crucible, Hot air oven (capable of operating at 105 °C), Ethyl alcohol, Muffle furnace (capable of operating at 600 °C).	Crude Fibre Cl. 4.2, Table 1 {clause 9 of IS 7874 (Part 1)}
5	Porcelain, silica or platinum dish, Meker burner, Muffle furnace at (550 ± 20°C), Weighing balance (LC- 1mg), Dessicator.	Total ash Cl. 4.2, Table 1 {clause 9 of IS 7874 (Part 1)}
6	Dilute Hydrochloric Acid- approximately 5 N, Porcelain, silica or platinum dish, Meker burner, Muffle furnace at (550 ± 20°C), Weighing balance (LC- 1mg), Dessicator, Whatman filter paper No. 42 or its equivalent, Air-oven (135 ± 2°C), Silver nitrate solution.	Acid-insoluble ash Cl. 4.2, Table 1 {clause 10 of IS 7874 (Part 1)}

The above list is indicative only and may not be treated as exhaustive.

ANNEX - B

**SCHEME OF INSPECTION AND TESTING
FOR MUSTARD AND RAPE SEED OILCAKE AS LIVESTOCK FEED
INGREDIENT
ACCORDING TO IS 1932 : 1986**

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING – The Standard Mark as given in Schedule of the licence shall be stenciled/printed on each bag of Mustard and Rape Seed Oilcake as Livestock Feed Ingredient or printed on the label applied to the bag, as the case may be, provided always that the material in each bag to which this mark is thus applied conforms to every requirement of the specification.

3.1 Packing and marking shall be done as per the provision of the Indian Standard. In addition, the following details shall be mentioned on each bag legibly and indelibly:

a) BIS Licence No. CM/L_____.

b) BIS website details i.e – “For details of BIS certification please visit www.bis.gov.in”.

4. CONTROL UNIT – For the purpose of the scheme, the entire quantity of Mustard and Rape Seed Oilcake as Livestock Feed Ingredient of one type and grade manufactured continuously in a shift of eight hours or part thereof from the same consignment of raw material shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1
LEVELS OF CONTROL

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method Cl. Ref.	Test Method IS		No. of Sample	Frequency	Remarks
4.1	Description	4.1	IS 1932	R	One	Each control unit	
4.2, Table 1	Moisture	4	7874 (Part 1)	R	-do-	-do-	
-do-	Crude protein	5	7874 (Part 1)	R	Three	-do-	
-do-	Crude fat	7	7874 (Part 1)	R	One	-do-	
-do-	Crude fibre	8	7874 (Part 1)	R	-do-	-do-	
-do-	Total ash	9	7874 (Part 1)	R	-do-	-do-	
-do-	Acid-insoluble ash	10	7874 (Part 1)	R	-do-	-do-	

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.