

**भारतीय मानक**  
**Indian Standard**

**IS 2154 : 2014**  
(Reaffirmed 2019)  
(Reaffirmed 2024)

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**पशु आहार घटक के रूप में नारियल**  
**की खली — विशिष्टि**  
( तीसरा पुनरीक्षण )

**Coconut Oilcake as Livestock**  
**Feed Ingredient — Specification**  
( *Third Revision* )

ICS 65.120

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June 2014

Price Group 1

Animal Husbandry, Feeds and Equipment Sectional Committee, FAD 05

## FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Animal Husbandry, Feeds and Equipment Sectional Committee had been approved by the Food and Agriculture Division Council.

This standard was first issued in 1962 and subsequently revised in 1972 and 1986. Earlier, the requirements of coconut oilcake were covered under two separate standards namely, IS 2154 : 1986 'Coconut oilcake as livestock feed ingredient' which covered coconut oilcake obtained after expression of oil by the expeller, hydraulic or rotary method and by *Ghani* method and IS 3591 : 1985 'Solvent-extracted coconut oilcake (Meal) as livestock feed ingredient' which covered coconut oilcake obtained after solvent extraction. While reviewing IS 2154 and IS 3591, it was decided to develop only one specification for particular oilcake irrespective of its process of manufacture. Accordingly, the requirements for coconut obtained from expeller process and solvent extraction process have been revised and amalgamated into one comprehensive standard which would be third revision of IS 2154. With publication of this standard, IS 3591: 1985 shall be withdrawn.

In this revision, the grading of coconut oilcake expeller pressed by *Ghani* or *Chekku* process has been removed. Requirements for solvent-extracted coconut oilcake which were covered under IS 3591 has been included as Type II. Requirements of crude protein, crude fat, crude fibre, total ash and acid insoluble ash for coconut oilcake have been updated.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

# Indian Standard

## COCONUT OILCAKE AS LIVESTOCK FEED INGREDIENT — SPECIFICATION

### ( Third Revision )

#### 1 SCOPE

This standard prescribes the requirements and the methods of sampling and test for coconut oilcake used as livestock feed ingredient.

#### 2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

| IS No.               | Title                                                                       |
|----------------------|-----------------------------------------------------------------------------|
| 1070 : 1992          | Reagent grade water ( <i>third revision</i> )                               |
| 2052 : 2009          | Compounded feeds for cattle ( <i>third revision</i> )                       |
| 7874 (Part 1) : 1975 | Methods of test for animal feeds and feeding stuffs: Part 1 General methods |

#### 3 TYPES

The material shall be of the following two types:

- a) *Type I* — Product obtained from expeller process.
- b) *Type II* — Product obtained from solvent extraction process.

#### 4 REQUIREMENTS

##### 4.1 General

The material shall be free from rancidity, adulterants, insect or visible fungus infestation and from fermented, musty or other objectionable odour. It shall also be free from extraneous matter, including metallic pieces.

4.2 The material shall also conform to the requirements prescribed in Table 1.

#### 5 PACKING AND MARKING

##### 5.1 Packing

The material shall be packed in clean, dry and sound jute bags or HDPE bags as agreed to between the

**Table 1 Requirements for Coconut Oilcake as Livestock Feed Ingredient**  
(Clause 4.2)

| SI No. | Characteristic                                                 | Type I | Type II | Method of Test, Ref to Clause of IS 7874 (Part 1) |
|--------|----------------------------------------------------------------|--------|---------|---------------------------------------------------|
| (1)    | (2)                                                            | (3)    | (4)     | (5)                                               |
| i)     | Moisture, percent by mass, <i>Max</i>                          | 10.0   | 10.0    | 4                                                 |
| ii)    | Crude protein ( $N \times 6.25$ ), percent by mass, <i>Min</i> | 24.0   | 25.0    | 5                                                 |
| iii)   | Crude fat or ether extract, percent by mass, <i>Min</i>        | 7.5    | —       | 7                                                 |
| iv)    | Crude fibre, percent by mass, <i>Max</i>                       | 9.0    | 11.0    | 8                                                 |
| v)     | Total ash, percent by mass, <i>Max</i>                         | 8.0    | 8.0     | 9                                                 |
| vi)    | Acid insoluble ash, percent by mass, <i>Max</i>                | 1.5    | 2.0     | 10                                                |

NOTE — The values specified for the requirements at SI No. (ii) to (vi) are on moisture-free-basis.

purchaser and the vendor. The bags shall be securely closed with strong twine.

##### 5.2 Marking

Each bag shall be indelibly and legibly marked so as to give the following information:

- a) Name and type of the material;
- b) Name of the manufacturer;
- c) Batch or code number;
- d) Net quantity, when packed, in kg;
- e) Date of packing; and
- f) Any other requirements as given under the *Legal Metrology (Packaged Commodities) Rules, 2011*.

##### 5.2.1 BIS Certification Marking

The product may also be marked with the Standard Mark.

5.2.1.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder.

## **IS 2154 : 2014**

The details of conditions under which a license for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

### **6 SAMPLING**

Representative samples of the material for ascertaining conformity to this standard shall be drawn according to the method prescribed in Annex H of IS 2052.

### **7 TESTS**

**7.1** Tests shall be carried out as prescribed in col 5 of Table 1.

#### **7.2 Quality of Reagents**

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards : Monthly Additions'.

This Indian Standard has been developed from Doc No.: FAD 5(2464).

### Amendments Issued Since Publication

| Amend No. | Date of Issue | Text Affected |
|-----------|---------------|---------------|
|           |               |               |
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