

IS : 9599 - 1980

*Indian Standard*  
SPECIFICATION FOR  
RUBBER SEED CAKE AS LIVESTOCK FEED

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RUBBER SEED CAKE AS LIVESTOCK FEED

0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 28 August 1980, after the draft finalized by the Animal Feeds Sectional Committee had been approved by the Agricultural and Food Products Division Council.

**0.2** With increasing demand of the conventional ingredients, such as food grains, oilcakes, etc, for human consumption and other industrial uses it has become necessary to find out material for use as animal feedstuffs. In this direction, more and more industrial and other waste products are being screened and put to use. After intensive investigations, it has been found that the cake obtained of rubber seed could be successfully used as a source of protein for feeding different classes of livestock. At present fairly large quantities of rubber-seed cake are being produced in the country. With a view of ensuring its proper utilization, this standard is being formulated. It is felt that this standard when issued would not only assist the feed manufacturers in selecting the right type of material for their use, but would also help them in regulating the quality of their production.

**0.3** 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\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**1. SCOPE**

**1.1** This standard prescribes the requirements and methods of sampling and test for rubber-seed cake for feeding livestock.

NOTE — This standard does not cover the solvent extracted rubber-seed cake as livestock feed.

\*Rules for rounding off numerical values (*revised*).



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## 2. REQUIREMENTS

**2.1 Description** — The material shall be free from rancidity, adulterants, insect or fungus infestation and from fermented, musty or other objectionable odours. It shall also be free from extraneous matter, including coir fibre and metallic pieces.

**2.2** The material shall also comply with the requirements prescribed in Table 1.

TABLE 1 REQUIREMENTS FOR RUBBER-SEED CAKE AS LIVESTOCK FEED

Sl. No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST, REF TO CLAUSE NO. OF IS : 7874 ( Part I )-1975*
(1)	(2)	(3)	(4)
i)	Moisture, percent by mass, <i>Max</i>	7	4
ii)	Crude protein ( $N \times 6.25$ ), percent by mass, <i>Min</i>	30	5
iii)	Crude fat, percent by mass, <i>Min</i>	5	7
iv)	Crude fibre, percent by mass, <i>Max</i>	7	8
v)	Total ash, percent by mass, <i>Max</i>	7	
vi)	Acid insoluble ash, percent by mass, <i>Max</i>	1	9
vii)	Caster husk and/or <i>Mahua</i> cake	Nil	11 and/or 12

NOTE — The requirements for items (ii) to (vi) are on moisture-free basis.

\*Methods of tests for animal feeds and feeding stuffs: Part I General methods.

## 3. PACKING AND MARKING

**3.1 Packing** — The material shall be packed in clean and sound jute bags. Each bag shall contain 75 kg of the material. The mouth of each bag shall be machine stitched or rolled over and hand stitched. If hand stitched the stitches shall be with strong jute twine with at least 14 stitches in each row.

**3.2 Marking** — Each bag shall be suitably marked or labelled to give the following information:

- Name of the material;
- Name of the manufacturer and brand name, if any;
- Batch or code number; and
- Net mass in kg.

#### 4. SAMPLING

4.1 The method of drawing representative samples of the material and the criteria for conformity shall be according to Appendix C of IS : 2052-1979\*.

#### 5. TESTS

5.1 Tests shall be carried out by the appropriate methods as referred in col 4 of Table 1.

5.2 **Quality of Reagents** — Unless specified otherwise, pure chemical and distilled water ( *see* IS : 1070-1977† ) shall be employed in the tests.

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

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\*Specification for compounded feeds for cattle ( *third revision* ).  
†Specification for water for general laboratory use ( *second revision* ).



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