

(PREVIEW)

IS : 4193 – 1986

# *Indian Standard*

## **SPECIFICATION FOR GUAR MEAL AS LIVESTOCK FEED INGREDIENT**

*(First Revision)*

### **1. SCOPE**

**1.1** This standard prescribes the requirements and the methods of sampling and test for guar meal for use as a livestock feed ingredient.

### **FOREWORD**

**0.1** This Indian Standard ( First Revision ) was adopted by the Indian Standards Institution on 28 November 1986, after the draft finalized by the Animal Feeds Sectional Committee had been approved by the Agricultural and Food Products Division Council.

**0.2** Guar meal is a by-product obtained during the manufacture of guar gum. In the process, the hulls of the guar seeds ( *Cyamopsis tetragonoloba* ) are separated. After the separation of the hulls, the seeds are subjected to grinding, milling and shifting to separate the germ and the endosperm. Both the hulls and the germ together constitute 'guar meal'.

**0.3** Guar meal is used as a common livestock feed in various parts of the country. However, it has been observed that it has a toxic effect when fed to poultry in large quantities. It is, therefore, suggested that guar meal in the poultry feed should not exceed 5 percent by mass.

**0.4** The composition of guar meal compares favourably with some of the common protein-rich feeds for livestock. In order to ensure the availability of guar meal of a proper quality for feeding livestock, formulation of this standard was considered necessary.

**0.5** This standard was first published in 1967. In this revision, requirements for crude protein, crude fibre and acid insoluble ash have been revised.

**0.6** The committee responsible for this standard is seized of the aflatoxin problem. The safe limit and reliable method for its estimation will be included in the standard no sooner these are finalized.

**0.7** 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 same as that of specified value in this standard.

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