

## **IS 10170 : 1982 Specification for Byproduct Gypsum**

Alkaline soils are characterized by variable soil electrical conductivity, high pH and high exchangeable sodium percentage (ESP). These factors in turn lead to adversely impacting the availability of several important nutrients and minerals. As a result, crop yields are much lower in alkali soils than normal soils.

To tackle the above scenario, comes the concept of soil amendments, which refer to any material added to the soil to improve its physical or chemical properties. One such soil amendment is Byproduct gypsum, which, like mineral gypsum is one of the major soil amendments used for reclamation of alkali soils. Byproduct gypsum is produced in the country in phosphoric acid plants following wet process technology by the action of sulphur acid on the rock phosphate.

This standard, published in the year 1982, prescribes the requirements and methods of sampling and test for byproduct gypsum used as an amendment for alkali soils. In order to ensure the efficacy of Byproduct Gypsum as a soil amendment, the standard requires the product to have the optimum concentrations of Calcium sulphate dihydrate (min. 70%), sodium and fluorine, when tested as per the test methods given. The standard also requires that the maximum free moisture content in the product must be less than 15%.

The requirements for packing, marking and sampling are also prescribed in the standard.

As on Oct 2024, there are two (02) BIS licenses for this product in the country.