



IS 17780 - FORTIFIED RICE

Rice is one of the most **widely consumed grains** in the world. This makes rice an appropriate **fortification vehicle** for populations that suffer from micro-nutrient deficiencies. Micro-nutrient **malnutrition** severely impairs the quality of life. Hence the requirements for adequate fortification of rice is addressed in this Indian Standard.

Fortified Rice is a blend of fortified rice kernels and polished raw or parboiled rice in the ratio of 1 : 100 or 2 : 100. Rice shaped kernels containing vitamins and minerals produced through extrusion or whole rice kernels coated with vitamins and minerals are called as fortified rice kernels. Fortified rice kernels shall be uniformly distributed in fortified rice.

Fortified shall be free from free from added colouring matter, foreign matter, metal pieces, mold, weevils, obnoxious substances, discolouration, poisonous seeds, rodent hair, excreta, and all other impurities. The key micro-nutrients that can be fortified in rice are **Iron, Folic acid, Vitamin B12**. **Other nutrients like Vitamin A, Zinc, and B group Vitamins** may also be added.

Moisture content is crucial for storage stability and nutrient retention of fortified rice. Maintaining moisture content helps to prevent microbial spoilage and deterioration of rice. Maximum **Uric acid content** in fortified rice is also specified as excess uric acid indicate impurities. Rice can be contaminated with **aflatoxins B1**, which are toxic compounds produced by certain molds during growth, harvest, handling, and storage stage of rice. The maximum limit for alfatoxins also is given in Indian standard to make sure that the fortified rice is safe for consumption.

The purpose of IS 17780 is to make rice, a staple food for many, more nutritious and accessible to all, helping **improve public health** by providing essential vitamins and minerals in a simple, affordable way. This standard ensures that fortified rice is safe, effective, and clearly labeled so consumers can make informed choices for their health.