



**BUREAU OF INDIAN STANDARDS**

## **Indian Standard SUNSET YELLOW, FCF, FOOD GRADE — SPECIFICATION IS 1695:2024**

Enhancing the quality and safety of our food holds paramount significance for the well-being of humanity. From ancient times, humans have continuously refined their dietary practices, evolving hunting methods and domesticating animals and plants. They have preserved food through physical means and introduced molecules to elevate flavours and prolong shelf life. Moreover, throughout history, numerous ingredients have fulfilled essential roles in diverse food items, ensuring an accessible, nutritious, flavourful, visually appealing, and secure food supply. The pivotal roles of food **additives precisely the food colours (both Natural and Artificial food colours)** and technological advancements have been instrumental in achieving these objectives over the years.

Colour is one of those important ingredients upon which the quality of food and flavour can be judged. **Vibrant and attractive colours make the food look delicious and appetizing, improve the taste and texture of the food and influence the consumer to buy the product through the visual perception.**

Therefore, the food colours are added to the food or drinks to change its colour for acceptability. **The food colours used may be either Natural or Artificial Food colour.**

**Natural food colours** are derived from plant tissues obtained from fruits, vegetables, and minerals and are generally considered safer. Examples of natural food colorants are annatto extract, beet juice, beta carotene, black/purple carrot, blue fruit juice colour etc.

**Artificial food colorants** are chemically synthesized and are often more vibrant. The production cost of these colours is relatively cheap and hence widely used. **They are mostly used in the processed foods, Confectionery, Baked goods and pharmaceuticals.**

**As we know that today's consumers are proactively seeking food products that contain 'safe' ingredients in them.** Artificial food colours, for sure makes food look more appealing but the questions comes in mind, how the quality of these food colours vis a vis their chemical Composition is ensured for the safety of the consumers.

**To address the concerns of the safety of the consumers, Bureau of Indian Standards has come up with a series of the Indian Standards for edible synthetic colours permitted under the Food Safety and Standards (Food Product standards and Food Additives)Regulation 2011. One of the such Standard of this series of food colour is Sunset Yellow, FCF Food Grade Specification as per IS 1695.**

IS 1695:2024 prescribes the requirements and the methods of sampling and test for sunset yellow, FCF, food grade. IS 1695 also **provides maximum allowable limits of heavy metals (like lead, arsenic, and mercury, Chromium, Cadmium, copper )**, for dye intermediates **It also specifies the test methods for the detection of heavy metals , Dye intermediates, Subsidiary dyes Unsulphonated primary aromatic amines, Sudan ,Total dye Content, Loss on drying, Water Insoluble matter.**

Standard has also laid down the requirements of the **safe packaging of the product in Glass containers , metals containers suitably lined with the polyethylene and marking and labelling of the Containers** for the safety of the consumers.

In nutshell, the Standard emphasize safety, alignment with global standards, and stricter limits on specific contaminants and aims to ensure the quality, safety, and proper labelling of sunset yellow FCF used in food products.