

## IS 6406: 2024 Brilliant Blue FCF, Food Grade — Specification

## 1. Definition

Brilliant Blue FCF is a synthetic food colorant that belongs to the triphenylmethane class of dyes. It is commonly used in food and beverages to impart a bright blue hue. This dye is water-soluble and has a characteristic intense blue color, making it a popular choice for coloring various products, such as soft drinks, confections, ice creams, and baked goods.

## 2. Quality Parameters Expected by Consumers

When it comes to the food-grade version of Brilliant Blue FCF, consumers typically expect the following quality parameters:

- Purity
- Color Intensity
- Solubility
- Stability
- Taste and Odor
- Compliance with Regulatory Standards
- Safety
- Labeling and Traceability
- Storage and Handling

In summary, Brilliant Blue FCF (Food Grade) should provide vibrant, stable color without affecting taste or odor, while adhering to Regulatory Standards for purity, safety, and performance. Proper labeling, traceability, and packaging are also crucial for consumer satisfaction and compliance with food safety laws.

## 3. How IS 6406 addresses these Quality Parameters

IS 6404 specifies a minimum percentage of pure Brilliant Blue FCF content. This ensures that the colorant is potent enough to achieve consistent coloring without excess impurities. The Standard sets strict limits for heavy metals, such as lead, arsenic, mercury, copper, chromium, and cadmium, to protect consumers from potential toxicity. The Standard also includes the hygienic condition for processing, packing, storage, and distribution of the product. The Standard also sets limits on organic impurities such as water insoluble matter, combined ether extract, subsidiary dyes, and unreacted intermediates that may arise during dye production, ensuring the dye is pure and safe for consumption. The Standard requires that Brilliant Blue FCF is water-soluble to ensure ease of use in food products. The Standard also includes labeling guidelines, ensuring that information like batch number, manufacturing date, purity level, and storage instructions are clearly displayed. This helps consumers and manufacturers handle the dye safely and ensures traceability.