



IS 1697:2024 — Erythrosine, Food Grade — Specification

Erythrosine is a synthetic cherry-pink food color derived from the disodium salt of 2,4,5,7-tetraiodofluorescein. Commonly known as FD&C Red No. 3, it is widely used in confectionery, bakery products, beverages, and decorative food items to enhance their visual appeal. IS 1697:2024 defines the quality and safety requirements for erythrosine used in food applications, ensuring its suitability for consumption.

Consumers expect food-grade erythrosine to meet stringent quality benchmarks, including high purity, safety from harmful contaminants, and compliance with food safety standards. Key quality parameters include:

Purity: The dye content must be at least 90% (on a dry basis) to ensure effective coloration.

Safety: It should be free from harmful impurities such as heavy metals (lead, arsenic, mercury) and microbial contaminants.

Consistency: A uniform reddish-pink appearance and solubility in water are essential for its intended use in food products.

The standard defines description and method of tests for various requirements for characteristics like total dye content, inorganic iodide content, subsidiary coloring matters, fluorescein, organic compounds other than coloring matter covering tri-iodoresorcinol percent by mass and 2 benzoic acid percent by mass, unsulphonated primary aromatic amines.

Further, the standard also prescribes maximum permissible limits for heavy metals like lead, arsenic, mercury, copper, chromium, cadmium, zinc. The standard mandates protective packaging and clear labelling, including batch numbers and expiration dates, to maintain product quality during storage and usage.

By addressing these quality parameters, IS 1697:2024 ensures that erythrosine is a reliable, safe, and high-quality food-grade product that aligns with consumer expectations and regulatory compliance.