



Summary of IS 1694: 2024 (Tartrazine, Food Grade – Specification)

Tartrazine is a synthetic lemon yellow azo dye commonly used as a food colouring widely used in a variety of processed foods and beverages, pharmaceuticals, and cosmetics due to its bright colour and stability.

Chemically, Tartrazine is known as **E102** in the European food additive numbering system. It is a **synthetic** lemon-yellow **azo dye** commonly used as a colouring agent in food, beverages, medications, and cosmetics. Its chemical name is **trisodium salt of 5-hydroxy-1-p-sulphophenyl-4-(p-sulphophenylazo) pyrazol-3-carboxylic acid**, and its molecular formula is **C₁₆H₉N₄Na₃O₉S₂**.

This Indian Standard IS 1694: 2024 - Tartrazine, Food Grade outlines the specifications, requirements, and testing methods for Tartrazine, a synthetic food colour. As per this Standard, the Tartrazine must be food-grade, processed under hygienic conditions, and meet specific criteria such as **purity, total dye content, and limits for contaminants**. **Minimum** dye content shall be **87.0% by mass**.

For testing dye content **Spectrophotometric method** is used and for determining dye intermediates **Paper chromatography** method is used. As far as packing specification is concerned, Tartrazine should be packed in glass, metal, or polyethylene containers.

To maintain product integrity, the standard mentions labelling on containers with information on label must include the name of the colour, chemical name, batch number, and date of manufacture.