

IS 2630:2021 Nitrobenzene — Specification (Third Revision)

Nitrobenzene is a toxic liquid that ranges in colour from pale yellow to yellow, widely used in the dye industry.

Nitrobenzene is one of the most important raw materials for the dye industry, and most of it is used directly or indirectly (as aniline) in dye manufacture. It is crucial for producing intermediates chemicals for azo dyes, including benzidine, metanilic acid, *m*-dinitrobenzene, and *m*-nitrochlorobenzene, and also in the manufacture of a variety of organic substances like induline quinoline, magenta, and nigrosine. Additionally, it acts as a selective solvent in the petroleum industry and a mild oxidizing agent in certain reactions, such as the fuchsin fusion and the quinoline synthesis.

First published by the Bureau of Indian Standards (BIS) in 1964, IS 2630 was revised in 1973 and 1992 to meet evolving industry needs. The third revision in 2021 introduces new methods for determining the purity of nitrobenzene and identifying low-boiling and high-boiling impurities.

This standard prescribes the requirements and the methods of sampling and test for nitrobenzene. It stipulates various physico-chemical properties, including purity levels and the identification of different impurities, along with their respective testing methods. Due to its high toxicity, the standard prescribes specific requirements for appropriate packing and marking.