

## IS 8637 : 2020 H Acid — Specification

**H Acid**, chemically represented as **1-amino-8-naphthol-3,6-disulphonic acid** (C<sub>10</sub>H<sub>9</sub>O<sub>7</sub>NS<sub>2</sub>), is an essential intermediate for the manufacturing of **azo dye**.

This Indian Standard specify the descriptive and technical requirements such as **purity** (min. 95 %), **assay**, matter insoluble in sodium carbonate solution and that of difference between **nitrite value** and **coupling value**.

During the process of manufacturing of H-acid, impurities, namely, Koch's acid and chromotropic acid maybe traced in the final product which can interfere with the dyeing process and affect color accuracy and stability. Therefore, the content of such impurities is also restricted to a maximum of 0.5 and 1.5 respectively.

Key specification includes determination of assay (by nitrite value) which shall be min. 75 % percent and shall be conducted on each of the individual samples while remaining characteristics shall be conducted on the composite sample.

Considering the development in analytical techniques, advanced test methods has been referred to determine purity and impurity profile using **High Performance Liquid Chromatography** (HPLC).

This standard also specifies the requirements of **Packing and Marking** as these affect the product's **shelf life** and ease of handling. The material shall be packed in steel drums lined with suitable polyethylene film or as agreed to between the purchaser and the supplier. Each container shall be securely closed and marked with following information such as Name of the material, Name of the manufacturer and his recognized trade-mark, if any, Batch number and Tare, net and gross mass.

This standard plays a crucial role in standardizing the quality of H Acid used in the production of **azo dyes**. This standard addresses the need for precision in determining **impurity profiles**, thereby supporting the **dye manufacturing industry** in maintaining **product quality**.