



IS 7910:2003 MONOETHANOLAMINE — SPECIFICATION

Monoethanolamine (MEA) is a colorless, viscous liquid with a mild ammonia-like odor. It is a type of amine compound used primarily in the production of detergents, cosmetics, and pharmaceuticals. In the pharmaceutical industry, it is used in the manufacture of penicillin, piperazine and anesthetics. MEA is also widely used in gas treatment processes of the fertilizer industry, refinery and dry ice manufacturing industry to remove carbon dioxide and hydrogen sulfide. In industrial applications, it acts as an emulsifier, surfactant, and pH adjuster. It also finds wide applications in textiles, dyestuff industry, in the scouring oils, viscose yarn spinning and anti-rust compound used in the formulation of lubricating oils. Its versatility makes it an essential ingredient in cleaning products, water treatment, and corrosion inhibitors. However, proper handling and safety precautions are important, as MEA can be irritating to the skin, eyes, and respiratory system.

For effective performance in industrial applications, Monoethanolamine (MEA) shall be of strong purity levels. The product should be a **colorless, clear liquid** with a **mild ammonia-like odor**, free from impurities or discoloration, with **low moisture content** and consistent **viscosity**.

IS 7910:2003 outlines quality standards for Monoethanolamine (MEA) to meet consumer expectations. The standard specifies **high purity** levels typically above 98% to ensure MEA performs effectively in applications like detergents, gas treatment, and pharmaceuticals. It requires the product to be a **colorless, clear liquid** with a **mild ammonia-like odor**, free from impurities or discoloration. **Viscosity** consistency is emphasized to ensure ease of use in various formulations, while **moisture content** is kept low to prevent product degradation and maintain stability. The packaging must be **secure** and **leak-proof** to protect against contamination during storage and transport. **Clear labeling** is mandated, providing safety instructions, handling guidelines, and compliance with regulatory standards.

These parameters ensure that MEA is safe, effective, and reliable for industrial and commercial use.