



## **Indian Standard IS 7911: 2000**

### **Diethanolamine Specification**

**Diethanolamine (DEA)** is a clear, slightly viscous liquid with a mild, characteristic odor, primarily used as an effective **gas scrubbing agent** to remove **carbon dioxide (CO<sub>2</sub>)** and **hydrogen sulfide (H<sub>2</sub>S)** from **natural gas**. It serves as a crucial intermediate in the production of **morpholine, surfactants, textile processing agents, and petrochemical demulsifiers**. Additionally, diethanolamine is valued for its role as an **emulsifier** and **dispersant** in **agricultural chemicals, cosmetics, and pharmaceuticals**, and as a **lubricant** and **softening agent** in textile applications.

To ensure **high-quality diethanolamine**, users expect a product with **high purity** (primarily diethanolamine with minimal impurities), **full miscibility with water and 96% ethanol**, and **controlled crystallizing and boiling points**. This stability is vital for consistent performance across industries.

**Indian Standard IS 7911**, developed by the **Bureau of Indian Standards (BIS)**, specifies the **safety and performance requirements** for diethanolamine, ensuring it meets precise **quality and purity standards**. This standard mandates a **minimum purity of 98%** for DEA, essential for gas scrubbing and other applications requiring high-grade diethanolamine. Additionally, IS 7911 outlines parameters for **moisture content, relative density, and crystallizing point** (not below 25°C) to ensure consistency in product quality. This standard also includes tests to verify the product's **physical properties**, ensuring **miscibility** and **solubility compatibility** for safe and effective use.

When purchasing diethanolamine, look for the **BIS Standard Mark** and compliance with **IS 7911** as an assurance of quality, safety, and performance. This will not only ensure that DEA is fit for purpose across industries but also builds **trust** in product safety and effectiveness for end users.