

## <u>IS 7918: 2001</u> <u>Diethylene Glycol Specification</u>

**Diethylene Glycol (DEG)** is a **hygroscopic liquid** primarily used for **gas dehydration** in applications like **natural gas processing**. It plays a versatile role across industries as a **conditioning agent** and **lubricant** in **textile processing** to enhance **fiber flexibility** and **elasticity**. Additionally, DEG serves as a **humectant** for **moisture control**, a **softening agent** in **glues and adhesives**, and an **additive in rubber compounding** to counteract the effects of mineral fillers. It is also used in **chemical extraction processes**, making it valuable in a wide range of manufacturing applications.

Consumers expect high-quality diethylene glycol to be free of suspended matter, fully miscible with water, and to meet specific color, density, and purity requirements for consistent and reliable performance. Parameters like boiling range, low water content, and controlled acidity are essential to ensure safety and stability in industrial use.

The Indian Standard IS 7918: 2001, developed by the Bureau of Indian Standards (BIS), outlines stringent quality and performance requirements for diethylene glycol. This standard mandates that DEG be free from impurities like suspended matter and establishes criteria for color (Pt-Co scale), relative density, boiling range, water content, acidity, and iron content. Additionally, it specifies acceptable levels for monoethylene and triethylene glycol to maintain product purity and effectiveness.

When purchasing diethylene glycol, look for the **BIS Standard Mark** and compliance with **IS 7918: 2001** as indicators of quality, safety, and performance