

Summary of IS 16714: Ground Granulated Blast Furnace Slag (GGBS)

IS 16714:2018 specifies the requirements for **Ground Granulated Blast Furnace Slag (GGBS)**, a key material used in **cement, mortar, and concrete** production. GGBS is a finely ground, non-metallic product obtained from **granulated blast furnace slag**, which is developed by rapid cooling of molten slag during iron production. It consists of silicates and aluminosilicates of lime, making it a valuable **mineral admixture** for construction.

The standard ensures product quality through defined **chemical and physical properties**. Key chemical requirements include a minimum glass content of **85%**, limits on magnesium oxide (17%), and moisture content not exceeding **1%**. These properties enhance the reactivity and durability of GGBS in cementitious applications. Physical requirements include a minimum fineness of **320 m²/kg** and compliance with slag activity indices, ensuring the material's contribution to strength development in concrete.

IS 16714 also emphasizes proper packaging, marking, and storage to maintain quality. GGBS is supplied in various approved packaging materials, with markings that include the manufacturer's name, batch number, and net weight. Storage guidelines recommend moisture-proof conditions to avoid clumping.

By adhering to IS 16714, manufacturers and users benefit from a high-quality product that improves the **strength, durability, and workability** of concrete/cement.