

## IS 6614:2021 Aluminum Chloride Anhydrous -Technical

Aluminum Chloride Anhydrous is a highly reactive, moisture-free solid, typically white to pale yellow. Known for its versatility, it's commonly used in industrial applications, including pharmaceuticals, dyes, and cosmetics manufacturing. Its "anhydrous" nature means it's free of water, which enhances its stability and effectiveness as a catalyst in chemical reactions. Due to its reactivity, Aluminum Chloride Anhydrous is a key component in making a range of products, from medicines to dyes and personal care items. **These diverse applications highlight Aluminum Chloride Anhydrous as an essential compound in India's industrial landscape**. However, it should be handled carefully, as exposure can be harmful without proper safety measures.

For effective performance in industrial applications, Aluminum Chloride Anhydrous shall be of strong purity levels. It should be completely anhydrous, meaning free of moisture. The appearance is expected to be white to pale yellow, signaling purity, and particle size should be uniform.

IS 6614:2021 defines quality standards for Aluminum Chloride Anhydrous in the form of Powder or Granule, focusing on parameters essential for consumer needs in industrial applications. It specifies **purity requirements** 98.5 % or more, ensuring that the compound is free from impurities for optimal effectiveness. The standard mandates **moisture control**, with the product required to be completely anhydrous, preserving its stability and reactivity. **Appearance guidelines** specify a consistent white to pale yellow color, indicating purity, while **particle size** standards ensure uniformity for ease of handling and efficient reaction in processes.

The standard also covers **packaging requirements** to maintain the product's quality, specifying moisture-resistant and tightly sealed containers to prevent contamination. Clear **labeling** is required, providing details on purity, handling instructions, and safety precautions.

These guidelines together create a reliable quality benchmark, ensuring that Aluminum Chloride Anhydrous meets consumer expectations for safe and effective use in industrial settings.