

IS 12345, Vinyl Acetate Monomer- Specification

Vinyl acetate monomer (VAM) is a critical organic compound primarily used as a building block in the production of polyvinyl acetate (PVA), polyvinyl alcohol (PVOH), and various other derivatives. It serves as a precursor in the manufacturing of **adhesives, paints, coatings, textiles, and various plastics**. Due to its versatile applications, VAM is an essential chemical in the industrial production of numerous consumer and industrial products.

VAM is generally expected to meet stringent quality parameters such as Vinyl Acetate Content, Moisture Content, Acidity and Inhibitor Content to ensure its optimal performance in downstream applications that mitigates the risk of negative impact on polymerization processes for production of polyvinyl acetate (PVA), polyvinyl alcohol (PVOH) and various other derivatives.

IS 12345 for Vinyl Acetate Monomer, formulated by Bureau of Indian Standards provides a comprehensive framework to address the aforementioned quality parameters for VAM. This standard sets forth specifications for the **physical**, **chemical**, **and safety-related properties of VAM** to ensure that it meets industry expectations. It also specifies testing methodologies for measuring key parameters like acidity, moisture content, and polymerization inhibitors.

To mitigate risks associated with exposure of VAM to air and moisture, IS 12345 also establishes **packaging and labeling requirements**. These measures are designed to maintain the integrity of the product and ensure it is delivered to consumers in optimal condition.

The **Quality Control Order** issued by Department of Chemical and Petrochemicals which is set to come in force w.e.f. 31.03.2025 mandates that **Vinyl Acetate Monomer sold, manufactured or imported in India comply with IS 12345** and display the BIS Standard Mark, ensuring high quality of VAM.

Summarising the above, IS 12345 plays a pivotal role in aligning the production of vinyl acetate monomer with the rigorous quality expectations of consumers by addressing factors such as purity, stability and testing. The standard also provides a framework for producing high-quality VAM that meets both safety and performance requirements for its diverse industrial applications.