

Indian Standard IS 16239:2021 - Polyurethane Matt Finish (Two Pack)

Polyurethane Matt Finish is a type of coating or paint that provides a durable, non-glossy, and smooth surface on various substrates, such as metal, wood, and plastic. The finish is achieved using a **two-pack polyurethane system**, which consists of a base component (polyurethane resin) and a hardener (activator), mixed together before application.

Polyurethane coatings are known in the industry as some of the toughest and most useful coatings available. Polyurethane coatings are versatile and have wide-ranging applications as commercial and industrial protective coatings as well as for use as decorative coatings on walls, floors and other surfaces. The coatings can be designed to be glossy or matt depending on the requirement.

Indian Standard **IS 16239** specifies the **requirements for Polyurethane Matt Finish (Two-Pack)** used in various applications, including industrial and architectural finishes. This standard provides detailed guidelines for the composition, performance, application, and testing of two-pack polyurethane coatings that offer a matte finish, commonly used for providing durable and aesthetically pleasing surfaces in different environments.

The standard specifies the formulation for the two-pack system, which consists of a **base component** and a **hardener/activator**. The correct mixing ratio of these components is crucial for ensuring the desired performance characteristics of the final coating. The standard defines the tests to ensure the **coating's performance**, including **adhesion**, **durability**, **film thickness**, **chemical resistance**, **mass**, **flash point**, **drying time**. These ensure the coating maintains its integrity under normal service conditions.

In summary, IS 16239 is essential for producing long-lasting, aesthetically pleasing, and robust finishes for various surfaces. By following this standard, manufacturers and applicators can ensure that the coatings deliver the **desired performance** and meet safety and **quality expectations.**