



IS 17509:2021: Setting the Standard for Safe, Comfortable, and Eco-Friendly Baby Diapers

IS 17509:2021 specifies the requirements for **disposable baby diapers** designed for external use. These **baby hygiene products** are used to absorb and contain waste to keep babies dry, clean, and comfortable. They consist of a **top sheet**, **absorbent core**, and **outer barrier** to ensure effective liquid absorption, retention, and leak-proofing. Baby diapers are classified into various sizes based on the weight of infants or toddlers.

It ensures **safe and skin-friendly baby diapers** that provide high levels of **absorbency** and **leak protection**. It also covers diapers to feature **soft materials** for comfort, **good fit** with secure fastening mechanisms, and **durable elastic bands** to prevent leaks around the waist and legs. Other desired qualities include **quick absorption rates**, minimal **rewet under load**, and **odor control**. It also includes biodegradable **baby diapers** or those marked as **hypoallergenic** to ensure safety for sensitive baby skin. Compliance with **hygiene and safety standards** is also a key concern.

The IS 17509:2021 standard outlines detailed specifications to ensure that **baby diapers** meet consumer expectations. It mandates the use of **non-toxic and skin-safe materials**, ensuring the **top sheet** resists moisture return and the **absorbent core** retains liquid effectively while keeping the baby's skin dry. The **leak-proof outer layer** prevents liquid escape, and the elastic bands secure a snug fit. Performance criteria such as **pH balance (5.5-8.0)**, **minimum absorption capacity**, and **rewet limits** are rigorously tested. The standard includes guidelines for **hygiene testing**, biocompatibility (to confirm non-irritant materials), and optional features like **biodegradability** and **anti-bacterial properties**. These measures ensure that the diapers are **safe, comfortable, and eco-friendly**, addressing the diverse needs of modern consumers.