

IS 13098:2024 - Automotive Vehicles — Tubes for Pneumatic Tyres — Specification

The **IS 13098:2024** standard specifies the requirements for **Pneumatic Tyre Tubes** used in a variety of automotive vehicles, including **passenger cars, trucks, buses, and heavy-duty vehicles**. This standard was first published in 1991 and was revised in 2012 and 2024 after due consideration of the practices prevalent in the industry and also to keep pace with the latest technological advancement in the field of tubes for automotive vehicles.

This standard ensures that tyre tubes are manufactured to meet rigorous safety and performance specifications. The tubes are primarily made from **butyl rubber (Class A)** or **natural rubber (Class B)**, chosen for their ability to withstand environmental factors and maintain structural integrity under challenging road conditions. This specification promotes compatibility with a wide range of tyre types, enabling tubes to offer durability, stability, and reliability.

Consumers place a high priority on **quality, air-tightness, durability, and resistance to wear and environmental stress** in pneumatic tyre tubes. A tube's ability to hold air without leakage, maintain elasticity under pressure, and perform consistently across varied temperatures directly impacts vehicle safety and ride comfort. The expected quality parameters also include resilience against degradation over time, ensuring minimal deterioration even with continuous use. Additionally, precise marking for easy identification of **size, manufacturing date, rubber type**, and other specifications are valuable features, allowing consumers to confirm the quality and suitability of the product.

To address these consumer expectations, IS 13098:2024 includes comprehensive **test requirements and labeling standards**. The standard specifies tests for **elongation strength, accelerated ageing, and splice durability**, ensuring the tubes maintain their shape and function over extended use. Air-tightness testing is conducted under controlled conditions to guarantee zero leakage. Thickness uniformity is also verified to eliminate weak spots and enhance performance reliability. Detailed labeling requirements ensure easy traceability, which boosts consumer confidence by providing a clear product origin and specification record. Overall, compliance with IS 13098:2024 enables manufacturers to deliver high-quality, dependable pneumatic tyre tubes that support safe and comfortable driving.