



IS 1741: 2019, Latex Foam Rubber Products

Latex foam rubber products are items made from a type of rubber called latex, which is derived from the sap of the rubber tree. Latex foam rubber is a soft, flexible, and porous material that is created by whipping latex with air and then curing it with heat.

Common latex foam rubber products include mattresses, pillows, cushions, foam sheets, medical devices (e.g., gloves, masks), automotive parts (e.g., gaskets, seals) and toys etc.

Latex foam rubber products should have the characteristics like it should be, **Soft and Flexible** (softer product is often preferred for **good comfort and cushioning**), **Porous** (allowing for airflow and breathability), **elastics** (can stretch and recover its shape easily), **Durable** (resists wear and tear, and can withstand compression) **and without any Odour** (Minimal or no unpleasant smell). Further, the product should be **as per the declared size**.

In view of applications of the product, the Indian Standard IS 1741, prescribes two types of the product as core and uncured (solid) and four grades as soft, medium, hard and extra hard depending upon the hardness index. The standard, including test methods, apply to flexible cellular rubber products known as latex foam rubbers but do not apply to sponge and expanded rubbers.

The Standard addresses all the key quality parameters as limits have been prescribed for hardness and dimensions. The standard also prescribed the flexing test and compression test. Further it is also specified that the latex foam rubber products shall have no objectionable odour.

As the product is used in medical devices and toys etc., maximum permissible limits for metallic impurities (copper and manganese) have also been prescribed.

These quality parameters specified in the India Standard ensure that the product meets the required standards for its intended applications and provides consumers with a reliable and effective product.