

How Flexible Foam is Made

1 Flexible Foam is made from a reaction of two primary ingredients; isocyanate and polyol. The two are mixed together with water and a few additives. The reaction immediately begins to take place where **2** bubbles are formed and the mixture expands and **3** rises to form foam.

There are two basic methods of manufacturing flexible foam: The **Slabstock foam process** and the **Molded foam process**.

A With Slabstock the mixture is poured onto a moving conveyor with side walls where it reacts, expands and rises into a slab (sometimes referred to as a bun) of foam. **B** It is then cut and allowed to cure for about 24 hours. The cured foam is then **C** cut or fabricated into various shapes for manufacturing purposes. Most foam for upholstered furniture and bedding is made using this method

D With Molded foam, the mixture is poured into a mold designed for a specific application where it reacts, rises and is allowed to cure. This is how most foam for the automotive industry is manufactured.

