

Towards circularity in the recycling of mattresses

At BASF, we are continuously looking for ways to reuse waste and re-enter product life cycles, thus promoting circular economy solutions. With the concept of the circular economy, we aim to decouple economic growth from the use of finite resources and to implement these principles into day-to-day business as quickly as possible. BASF is developing a process to manufacture polyurethane from old mattresses. From this BASF's partners can in future produce new circular foams and mattresses in virgin quality.

Every year in Europe, around 40 million mattresses are disposed. The most part of it end up in thermal recycling or landfill sites. At the same time, the production of new soft foam mattresses, fossil raw materials are consumed. The chemical recycling of mattress foams can close the loop for flexible polyurethane foam.

A wet chemical process is used to turn old mattresses into raw materials for the production of new flexible polyurethane foam blocks. These have already been successfully reused on a small pilot scale for the production of new foams. BASF is currently improving this process further in order to realize a forward-looking solution for the recyclability of foam mattresses.



Contact

E-Mail: PU4sustainability@basf.com

BASF
We create chemistry

Advantages of mattress recycling

- Used mattresses do **not end up in landfills** or **incinerators**
- The **used mattress foams** are **recycled** instead
- **New mattresses** can be manufactured on their **basis**
- Their **quality** is **as high as** that of a new mattress



BASF process for mattress recycling

