

Morphology control of flexible polyurethane foams by leaching salts

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Polyurethanes have various applications in industries and everyday life. It is classified as rigid, flexible, and semi-rigid types of materials. Flexible polyurethane foam(FPUF) is often used as cushions, car seats, and other interior materials due to its good comfort and acoustic properties. These properties can be morphologically related to the cavities and pores structures. If there is too much or not enough open pores, the foam will have unfavorable properties. Therefore, it is a key to make FPUF to have optimum number of pores. This study is about making pores by leaching salts embedded in the cell walls. Washing the foams will dissolve salts and make additional pores. Since the FPUF is known for high resistance to water, the process won't harm original structure of the FPUF. This leaching method can be used as an easy way to control pores.