

Biodegradable Packing Material

Purpose

To use packing material to show that it can be dissolved in water.

Materials

packing peanuts (biodegradable)

small zip-lock bag

water

Procedure

1. Place several of the packing peanuts into a zip-lock bag.
2. Fill the bag about half full with water.
3. Close the bag and shake vigorously.
4. Observe the results.

Additional Information

1. The packing peanuts are made of a starch polymer which dissolves in water.
2. Point out that not all packing peanuts will do this. A variation might be to bring some which do not dissolve and try them as well.
3. This activity can serve as an interesting introduction to the concept of recycling. It could serve as a lead into a discussion of what recycling means. What happens to the packing peanut when it dissolves? How is this useful?

Questions for the Students

1. What are the advantages of soluble packing material?
2. What might these be made from?
3. Why would this packing material be a poor choice for coffee cups or leftover food?

Disposal

Solution should be poured down the drain with excess water.

Reference

ACS Meeting, Washington D.C., Jim Bradford, 1992.