



# Disappearing Coffee Cup

## The Purpose

To show that chemistry is full of funny reactions, as in the reaction of a polymer polystyrene with acetone. It is just like a magic!

## Materials

Polystyrene cups

Acetone

Large dish

## Introduction

Polystyrene is a polymer of an alkene, styrene.



Styrene

Polystyrene

Pieces of expanded polystyrene quickly break down and "disappear" when placed in acetone. However the material does not dissolve, but merely changes form.

## Application

Pieces of polystyrene cup is placed in acetone. Polystyrene cup quickly break down and "disappear".