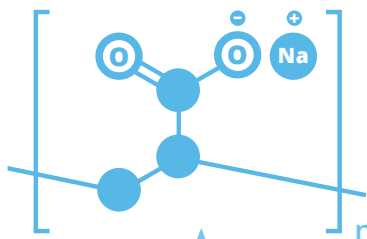


# CHEMISTRY ADVENT 2016 10

## MAKING FAKE SNOW



SODIUM POLYACRYLATE

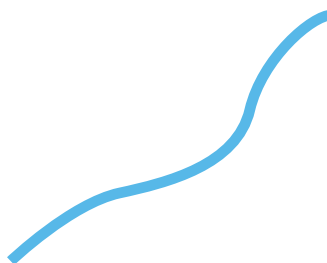
- Carbon
- Oxygen
- Na Sodium

*Hydrogens on carbon atoms implied; each carbon has 4 bonds.*

Sodium polyacrylate is a super-absorbent polymer that can be used to create fake snow. It is a white powder which can absorb 300 times its own weight in water.



WITHOUT WATER



WITH WATER

When dry, the chains of the polymer are coiled up.

When wet, the polymer molecules dissociate into negatively charged carboxylate ions and sodium ions. The negative charges repel each other, and the polymer expands.

