

Adhesion or adhesive force is the physical force, which makes liquid or solid material stick together. Adhesive force causes that contact lenses stick to eyes, raindrops stick to windows and that shower curtains stick to skin. But why is it sticky? Even though adhesion can be found by using many different materials, we will focus on water, as an example.

Water can stick to many different smooth surfaces: Windows, skin, leaves, CDs etc. Every material, where adhesion takes place consist of molecules, which attract (force) each other. That makes them stick together. Water-drops stick together without dissolving, even without a jar. The molecules in the center of this material stick to the molecules around. But the molecules at the material's surface stick to some molecules of their kind and to the materials around. These material around can be almost every material. The bigger the contact surface the bigger the adhesive force and the bigger the effect of sticking together.

Adhesion-experiment: Water-Glue