

Cornflour Gloop

A liquid that behaves like a solid?

Why is it 'normal' to make a mess when you knock over your drink?

The liquid in your drink is of low viscosity, which means it's a fast-flowing runny liquid. Honey is highly viscous so it is very thick and flows slowly. These fluids behave as you would expect and are called **Newtonian fluids**.

Non-Newtonian fluids

If you mix water and corn starch you make a non-Newtonian fluid. It flows like a thick liquid such as honey, but it feels like a solid – tap it to try. You can even scoop it up and roll it into a ball!



Why do non-Newtonian fluids behave like this?

Imagine you are at the Olympic stadium, surrounded by visitors. If you try to run through the crowd, you'll bump into people and be stopped. The solution? Move slowly!

Corn starch molecules are big and act like a crowd of people. They move slowly round each other in water. When movement is too fast (like when you tap it) then the molecules collide and behave like a solid.

Can you think of any other liquids with odd properties?

