

05/03/2015

## YOU NEED:

- Corn starch
- Tonic water (with guanine)
- A spoon
- UV light
- A bowl

## PROCEEDING:

Put 100 g of corn starch in the bowl and then slowly pour the tonic water while mixing.

You will get to a point where the fluid looks like liquid but when you hit it with the spoon it gets solid.

Turn off the lights, turn on the UV light and have fun!



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## WHY DOES IT HAPPEN?

Fluids have a property called viscosity that links the fluid speed gradient to the distance from a solid body, in accordance with the first Newton's law. Some fluids don't follow this rule under shear and have a period in which they behave in an unpredictable way.

This is the case of water and starch: under an initial shear, this fluid behaves like a solid for a while, coming back to liquid after some time.

Combining this property with the UV luminescence of quinine contained in tonic water, the result looks like a glowing mud. And you will enjoy it for sure!

### **Credits**

[http://www.youtube.com/watch?v=\\_0J4dRqg7CE](http://www.youtube.com/watch?v=_0J4dRqg7CE)