



15-MINUTE STEAM: DISH SOAP SILLY PUTTY



SUPPLIES PROVIDED

- 1/4 cup dish soap
- 1/3 cup slightly heaping corn starch

SUPPLIES FROM HOME

- Bowl for mixing
- Spoon for mixing

1. Put the corn starch in a small bowl.
2. Slowly add the dish soap to the corn starch.
3. Mix together using a spoon.
4. If it's too wet, add more corn starch. If it's too dry, add more dish soap.
5. When it gets too hard to stir, use your hands to kneed the rest together.

Once you make this silly putty, it only lasts about an hour before it dries out. You can add more soap to extend its life a little, but at the end of the day, it will need to be thrown out.

THE SCIENCE

Formation of a Non-Newtonian Fluid:

When cornstarch is mixed with a liquid like dish soap, it can create a non-Newtonian fluid, specifically a shear-thickening one (similar to "Oobleck").

This means the mixture gets thicker (more solid-like) under force or pressure and flows more easily (like a liquid) when handled gently.

Soap as the Liquid Medium:

Unlike water, dish soap is more viscous and contains surfactants that affect how particles interact. When combined with cornstarch, the soap provides a thicker base, which may lead to a more putty-like texture—stretchy, moldable, and even bounceable in some cases.

Microscopic Interaction:

Cornstarch particles are suspended in the soap. When force is applied, these particles temporarily lock together, making the mixture feel solid.

When the force is removed, they can slide past each other again, and the substance returns to a more fluid state.

Taken in part from onelittleproject.com/dish-soap-silly-putty/



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