

# NATURAL DYE PLAYDOUGH



## SUPPLIES

**1 1/4 to 1 1/2 Cups All Purpose White Flour**

**1/3 Cup Salt**

**1.5 Teaspoon Cream of Tartar**

**1 Tablespoon Vegetable Oil**

**1/4 Cup Food Powder Per Color**

**2/3 – 1 Cup Boiling Hot Water**

## INSTRUCTIONS

- 1** With adult supervision, combine the flour, salt, cream of tartar, vegetable oil, food powder and hot water in a bowl. \*Start with 1 1/4 cups flour first.
- 2** Stir until a dough starts to form.
- 3** Let the dough cool. If you have disposable gloves, you may want to use one (or not if you don't mind your hands getting initially sticky).
- 4** Start kneading the dough in the bowl until a ball forms. Remove and continue kneading on a non-porous surface (or use parchment paper on top of a table) until a soft and pliable dough forms.

## What's the Science?

Mixing salt, flour, water and oil together creates a mixture of solids and liquids that come together to form a suspension. This forms a pliable consistency that is fun to knead like playdough.

Water mixed with flour keeps the proteins sticking together to form that sticky texture and salt helps that process as well as acts as a preservative along with cream of tartar.

The oil doesn't dissolve in water so those particles are suspended in liquid and keeps your dough from drying out. The natural powders are there to simply add color to your playdough.