DIY Play-Dough.



Play-dough can be quickly made from common ingredients found in the kitchen. The recipe below makes a ball approximately 8cm in diameter and can be scaled according to requirements.

Ingredients.

120ml	(½ cup)	plain flour
5ml	(1 teaspoon)	cream of tartar
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40ml ($^{1}/_{6}$ cup) salt

120ml (½ cup) cold water 7.5ml (½ teaspoons) cooking oil

Food colouring as required.

Method

- 1). Put all of the ingredients into a glass bowl (500ml +) and stir thoroughly.
- 2). Heat in microwave cooker for ~30s on high power. Remove bowl and stir thoroughly.
- 3) Heat in microwave cooker for 10s on high power. Remove bowl and stir thoroughly.
- 4). Repeat step 3 until the mixture solidifies into a 'squashy ball'.
- 5). Leave to cool, then knead thoroughly (30 60s).
- 6). Store in an air tight container or plastic bag should last several weeks.



Conductive Play-dough

This mixture conducts electricity quite well and so can be used as 'wires' so that young children can make simple circuits with LEDs, buzzers and batteries.

The conductivity is a result of electrolytic action between the metal component leads and the salt in the Play-dough mixture. The metal leads will become tarnished after a while and will need to be cleaned.

The resistivity of Play-dough is a function of the current passing through it but it will provide sufficient resistance to limit the current through LEDs when operated from a 9V battery.

The picture below shows a simple circuit made from the Play-dough mixture.

