

Cutting oil is oil used in machining and manufacture of metal products, which generates a great deal of heat. Cutting oil is applied to the work area, to carry away some of the heat and lubricate the cutting tool, enabling a better cutting motion with less friction and extending the tool life. Cutting oil can be made easily, using general household products.

### Things You'll Need

- 1 quart of motor oil
- 3 cups of dish soap
- 4 gallons of water

Add the dish soap to the water.

Mix the soap into the water so it dissolves. The soap is the catalyst that enables the oil and the water to mix; otherwise the different densities make the oil float on top of the water.

Pour in the motor oil. Make sure that the water and the oil are mixed properly together with no separation. The water acts as a coolant in the cutting oil, while the oil acts as the lubricant, as the water is evaporated off by the heat generated in the cutting process.

### Tips & Warnings

- If a sticky residue is left on the cutting tool following use, then the cutting oil mix contains too much soap.
- A fire extinguisher should be kept handy as a precaution against the oil catching fire in the cutting process. When using this cutting oil, cutting machines should be set to a slower speed.