

Water and Oil Density Measurement



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Objectives

- Know What is Density.
- The features of the Density.
- How to know the density of something like the oil.
- See chemical reactions and see what happens.
- How determine the density of something with many steps.
- Prepare a heterogeneous mixture.
- The Density of water and oil.

Theoretical Foundation

The density of a substance is the relationship between its mass and volume.

Density is a property that does not depend on the amount of substance.

So the formula is

Density= mass/volume

Oil floats on water because it is less dense



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Materials

- Measuring cylinder.
- Wash-bottle
- Water
- Oil
- Precision Scale
- Calculator if u want to go faster in the division.



Experimental Process

I take my measuring cylinder and I pour water with the wash-bottle, then I weight it with the Precision Scale and I divide the weight of the measuring cylinder with water with the quantity I mean the volumen. Example: 78,8 g / 80 mililiters.

I divide this numbers and I have the density of the water.

Next I repeat the process with the oil, taking care of the oil and I have the density of the oil.

	Weight (g)	Volume (cm ³)	Density (g/cm ³)
Water	78,8	80	1 g/mililiters aprox.
Oil	71,8	80	0,90 g/mililiters

Results

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Conclusions

I analyze the oil and the water.

The density of water is weighther than the oil.

We need to divide mass with volumen to have density.

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Notes from Fysics and Chemistry class.

