

# Water and Oil Density Measurament



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# **Objectives**

- Know What is Density.
- The feautures of the Density.
- How to know the density of something like the oil.
- See chemical reactions and see what happend.
- How determine the density of something with many steps.
- Preapare an heterogeneous mixture.
- The Density of water and oil.

# **Theoretical Foundament**

*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 you 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 volume. Example: 78,8 g / 80 milliliters.

I divide these 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 (cm3)	Density (g/cm3)
Water	78,8	80	1 g/mililiters aprox.
Oil	71,8	80	0,90 g/mililiters

## **Results**

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## **Conclusions**

I analize the oil and the water.

The density of water is weighther than the oil.

We need to divide mass with volumen to have density.

## **Bibliography**

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Notes from Fysics and Chemistry class.

