



Centro Escolar Zamá

“Using hydrocarbons for ink production.”

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Area: Medio Ambiente

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Juvenil

Summary

Because of the economic and environmental problems, different methods have been used to solve them; one of them is air pollution mainly caused by the automobile sectors, so we decided to make an ink that tries to stop air pollution so that it does not reach the lungs and affect health, after capturing emissions of carbon through tests and other sources of pollution reusing useful pollutants such as hydrocarbon using it to make 2 types of watercolor

Objective

To get ink based on hydrocarbons waste from the residual particles of a car exhaust.

Justification

We chose this issue as pollution poses a significant environmental risk to health..

Research question

¿How to elaborate ink from the residual particles of a car exhaust?

Problem Statement

Air pollution is currently one of the most severe environmental problems in the world. It is present in all societies, regardless of the level of socio-economic development, and it is a phenomenon that has a particular impact on human health.

Hypóotesis

If we elaborate ink using the hydrocarbon extracted from the car exhaust so we will give an alternative use.

Results

In the collection of dust with the filters, a minimum amount of dust was obtained, since it was shortly placed in the filters of the cars.

In the production of the ink, two results were obtained, one positive and one negative. First, approximately 2 ml of heterogeneous mixture was obtained with a thick consistency, an indefinite odor and intense black color.

Materiales



1. Hydrocarbon wastes



2. Glycerin



3. Wheat germ



4. Olive oil



5. Isopropilic acid



6. Ethylic alcohol of 96%



7. Final result

Procedimiento



8. Put the hydrocarbon wastes in a test tube



9. Put the glycerin by continuous dropping



10. Add the wheat germ



11. Add the 3 sustancias and put the Isopropilic acid



12. Add the alcohol of 96%



13. Final results

Conclusions

We conclude that we must be aware of the damages that are currently being experienced in terms of both health and the environment, since pollution is not only a problem that affects humans, but also the whole world

Discuciones

The results that we have obtained were desired, since we could check our hypothesis, we could give an alternative use for the hydrocarbon residues, in our first test the results were successfully, since we used as binders the vegetable oils: wheat germ and olive, this give a fluid consistency, just like we avoid its hardening. In our second test the results haven't been the desired ones because of the resistol, to give it a better consistency, provoking its hardening, its state was irreversible.

Bibliografía

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