

A Portable Incinerator for Disposing Sanitary Napkins (Part-1)

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Abstract: Disposal of sanitary pads has become a big issue in today's world. It has tremendously affected the environment. Hence, to combat this problem, I have come up with an easy solution. It's the Incinerator! A uniquely designed Incinerator can dispose these waste without creating much pollution. The problem of improper disposal of menstrual waste is a major road block to our achieving the Swachh Bharat Mission's goal to create a clean India. The Incinerator created, had several layers of insulation. Internally, it had the capacity of 2 Kg, i.e., inner most box had the capacity to hold the waste of 2kg. This Incinerator was assembled with heat appliances. An electric Incinerator was developed. It is a portable Incinerator which can be assembled in our houses.

Keywords: Incinerator, degrade, disposal, sanitary pads.

1. Introduction

1) Objective

To assemble an electric Incinerator for disposing Sanitary napkins.

2) Hypothesis

An electric Incinerator may be effective enough to discard the menstrual waste.

3) Diagrammatic Representation of the Incinerator

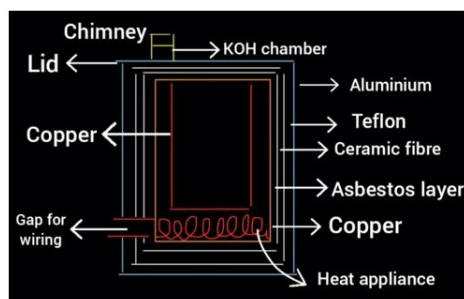


Fig. 1. Incinerator

2. Methodology

1) Experimentation- Protocol

- Take an aluminium cuboid box of 5 Kg capacity. Coat it with Teflon on the interior side.
- The next layer will be of Ceramic fibre with 0.5 inches thickness. It will have Asbestos layer.

All the three layers: Teflon, Ceramic fibre and

Asbestos will act as an insulator.

- Another cuboid shaped copper box with 3 Kg capacity will be fixed over these layers. It will have heat appliances.
- A gap at one end will be needed for passing the wires.
- This portable Incinerator has front door opening system.
- A 2 Kg cuboid shaped copper box must be placed as the innermost layer with an ash tray placed at the base to collect the remains of the burnt pads.
- 4 pads can be disposed at once. In order to degenerate these pads, power of 100 W, Current of approximately 8.33 A and 12 V voltage will be needed.
- Every medium sized sanitary pad will give approximately 1gm of ash after burning.
- The box is given a chimney at the top for the fumes to pass through. It has Potassium hydroxide chamber for absorption of carbon dioxide.

2) Advantages of this Incinerator

- Portable in size and can be kept in a house, office, restaurant, etc.
- The garbage gets disposed on its own.
- Eco-Friendly disposal.
- The ash obtained can be used as fertilizers for plants.

3. Conclusion

- Due to its small and compact size, it can be used in urban as well as rural places where enough electricity is available.
- As it consumes lot of electricity, the monthly cost to dispose the sanitary pads increases. It's cost effective in making but lots of voltage is needed to degrade commercial pads.

References

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