



CLEAN ENVIRONMENT BY SUBSTITUTING THERMOCOL WITH AGRO WASTE AND ORGANIC GUM



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OBJECTIVE

- **To replace thermocol using agro waste and organic gum for a clean environment.**
- **Thermocol is one of the most dangerous non decomposable, non recyclable polymer which has become an integral part of our daily life. It is used in various fields like packaging, decoration, cutlery etc inspite of knowing the hazardous effects it causes in our environment. With a hope to clean our earth by substituting thermocol, we have come up with a project 'Clean Environment by Substituting Thermocol with Agro Waste and Organic Gum'**





Why to replace thermocol?

- **1. It is a carcinogen**

Styrene is a carcinogen and increases the risks of cancer in humans.

- **2. It is non-biodegradable**

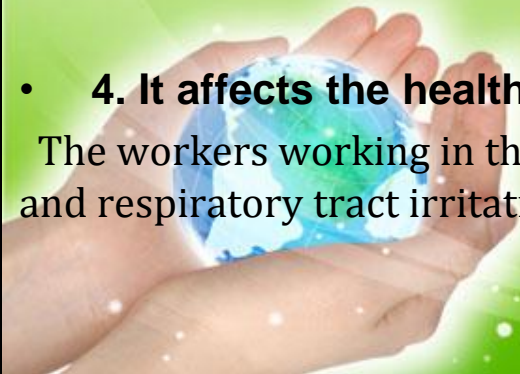
Thermocol is non-biodegradable because it is photolysis resistant. Hence, thermocol is burnt to reduce the waste but incinerating thermocol is more harmful than littering those in our environment.

- **3. It contaminates the food and drinks**

Even though food and drinks are served on thermocol plates and cups, these actually contaminate the food and beverages and affect the health and the reproductive systems of humans.

- **4. It affects the health of workers who work in thermocol manufacturing plant**

The workers working in thermocol manufacturing units for a prolonged period complain of eyes, skin, and respiratory tract irritation as well as gastrointestinal complications.



PLAN OF ACTION



1. PREPARATION OF AGRO WASTE

- First get Sugarcane Bagasse and corncob.
- Wash it thoroughly and cut it into smaller pieces.
- Dry it in sun.
- Powder the sugarcane baggase and corncob.

2. EXTRACTING GUM FROM THE TREE

- Scrap out the bark of the tree with a small knife.
- Scrap the hardened resin or gum from the tree after 4-5 days.
- Soak it in water.

3. PREPARATION OF THE FINAL PRODUCT

- Mix the gum and the powder
- Spread it into a thick sheet and let it dry.



Eager beaver



Washing and Drying Agro waste

BLAZE A TRAIL



Neem Gum



Neem Gum Solution



Agro Waste powder



Dough



Moulding



We are ready with our products



ADVANTAGES OF THE SUBSTITUTE



- With the use of the Agro waste we can prepare packaging unit, cutlery, seed bed or grow bag.



- It is decomposable and acts as a compost for the plants.



ADVANTAGES OF THE SUBSTITUTE



- It is water proof, light in weight and cannot be easily broken.
- If burnt also, does not produce any harmful gases.
- It can also be an effective way of using agro waste.
- It can be reused as stuffing for packaging.



WHAT NEXT



Further research needs to be conducted for the wider application.





Using eco-friendly substitute for thermocol is the next step to turn the world into a better place to live in.

“SAY NO TO THERMOCOL”



“ BE A PART
OF THE
SOLUTION
Not PART
OF THE
Pollution ”
— The Fresh Quotes —





THANK YOU

