

RECYCLE AND REUSE OF PLASTER OF PARIS

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Abstract - In this venture we are expecting to decrease the ecological contamination, caused due to visarjan of different idols of God during celebrations. The primary driver behind taking this task is to forestall the contamination in the climate particularly water contamination. Water contamination is the defilement of water bodies for the most part because of human exercises, so it adversely influence its purposes. Water bodies incorporate lakes, streams, sea, supplies and ground water. Pop isn't water dissolvable. Additionally, the paints used to make the symbols are oil paints which comprise of profoundly harmful synthetic compounds and weighty metals that caused water contamination. Thus, the idols made of pop and synthetic substances actually hurts climate.

Key Words: Water Bodies, Contamination, POP.

1. INTRODUCTION

On happy events, for example, Ganesh Chaturthi, Durga Puja, Diwali and so on, it has been a practice to drench symbols in water bodies like streams, lakes, lakes, estuaries, open seaside sea shores, wells and so on.

Plaster of Paris (POP) symbols are being used in masse and have emphatically stole the business sectors. Plaster of Paris (POP) symbols are exceptionally simple to make in molds, similarly cost less and have great strength and security.

Be that as it may, POP icons when drenched in water, they don't break up in water and stays as such for a significant stretch. This contributes exorbitantly to water contamination in streams, lakes, lakes and ocean. The icons are additionally found trapped in the water and block the regular progression of water bodies prompting stagnation. Adornment of POP symbols with substance paints and fake extras additionally supplements the issue by adjusting the physic-synthetic ascribes of water bodies like water hardness, acidic substance, drop in oxygen level and so on. Substance paints alongside stain and clean utilized, contain numerous weighty metals like chromium, mercury, lead, cadmium and so forth which hurt the amphibian framework and upset the existence pattern of sea-going creatures. The dirtied water bodies additionally raise a serious medical problem when utilized for different purposes like drinking, washing, in farming and so on. Submersion of an enormous number

of POP symbols in regular water bodies weakens the nature of water as well as stances unfavorable consequences for the sea-going biological system and climate.

Plaster of Paris is otherwise called gypsum, which is utilized for completing in development. This task goal to diminish the contamination brought about by the drenching of symbols and reusing them alongside different materials in development.

2. OBJECTIVE

- To decrease water contamination caused because of icon drenching of POP.
- To analyze and compare properties of traditional Plaster of Paris and extracted Plaster of Paris.
- To develop new product by adding extracted POP to other materials like fly ash, sawdust, plastic, concrete etc.

3. METHODOLOGY

1. Collection of various pop idols.
2. Research on various chemicals and natural ingredients that can be used to dissolve POP.
3. Use of Citric acid to dissolve the POP.
4. Letting the pop get dissolve and form a clay like texture.
5. Removing the moisture content by oven drying method.
6. Making powder of the dry lumps after oven drying.
7. Using the Powder for experimenting.
8. WE made chalks out of the powder by making wooden moulds and filling the powder mixture in it.
9. We mixed tree asbestos glue in the powder to make a paste and tried to give it a cube shape.
10. We have made a tile out of our recycled powder by adding some fibres in the recycled pop mixture.

Table -1: Ratio of chemicals to disintegrate POP idols.

Sample No.	Chemical	Ratio of weight of chemical to weight of idol
1	Normal water	-
2	Papad Khar	1:1
3	Salt	1:1
4	Baking soda	1:2
5	Citric Acid	1:1

Table -2: Ratio of citric acid to disintegrate POP idols.

Sample No.	Chemical	Ratio of weight of chemical to weight of idol
1	Citric Acid	1:2
2	Citric Acid	1:4

4. PHOTOGRAPHS



Fig -1: Samples of Reuse of recycled POP.

5. CONCLUSIONS

By this project we will be able to recycle and reuse Plaster of Paris, By dissolving it and adding some natural admixtures to improve its properties, and reuse it in a proper way.

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