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Evaluating the Environmental Impacts of Thermocol by Performing the Life Cycle Analysis

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Abstract: Worldwide humans are very innovative in finding efficient material serving several purposes to ease our lives. Unfortunately these materials though advantageous are non-biodegradable in nature and threaten our environment due to their long lifetime even after their disposal. One among them is thermocol, substantially used in packaging and construction industry, which is a kind of plastic its negative effects are not under limelight. After usage of thermocol due to lack of knowledge in proper disposal creates effects like soil infertility and deleterious to aquatic life. The major problem arises by burning thermocol which releases more than ninety hazardous chemicals particularly carbon monoxide and styrene vapours which effects the central nervous system of human beings.

In our day to day life thermocol is used extensively and it is not disposed in a scientific matter. Therefore in article various impacts on the environment and to prevent addition of thermocol material into pollutant category life cycle analysis is performed, from its production till it is disposed to different sources. Reuse of this material is an appreciable choice instead of disposal to attain sustainability. With the inventory and impact studies of life cycle analysis, the awareness among consumers and end user is being emphasized and trying to implement a closed loop in the thermocol's life. Thus study will provide the basic information about the impacts of thermocol on the environment and also substantiate the importance of recycling.

Keywords: *Thermocol, Life Cycle Analysis Recycling, Sustainability*

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