

# Waste Plastic to Oil Conversion

## Description:

### **Waste Plastic to Oil Conversion. Production of Oil from Waste Plastics and Polythene using Pyrolysis Process. Waste Plastic Pyrolysis**

Pyrolysis is the chemical decomposition of organic substances by heating the word is originally coined from the Greek-derived elements pyro "fire" and lysis "decomposition". Pyrolysis is usually the first chemical reaction that occurs in the burning of many solid organic fuels, cloth, like wood, and paper, and also of some kinds of plastic. Anhydrous Pyrolysis process can also be used to produce liquid fuel similar to diesel from plastic waste. Pyrolysis technology is thermal degradation process in the absence of oxygen. Plastic waste is treated in a cylindrical reactor at temperature of 300°C – 350°C. Now a day's plastics waste is very harmful to our nature also for human beings. Plastic is not easily decomposable its affect in fertilization, atmosphere, mainly effect on ozone layer so it is necessary to recycle these waste plastic into useful things. So we recycle this waste plastic into a useful fuel.

Pyrolysis of waste plastic is a prospective way of conversion of waste plastic into low-emissive hydrocarbon fuel. Waste plastic materials viz., polyethylene, polypropylene, polystyrene and polyethylene terephthalate were collected from local convenience store packing materials. Waste plastic material pyrolysis was conducted as individual plastics and as mixed feed in a new laboratory scale batch reactor. Hydrocarbon molecules from the basic materials are split under the impact of catalyst inside the reactor in 70–240 °C. The reduction of process takes place from 500–600 °C to 240 °C in the presence of catalyst. The analyses of pyrolysis products suggested that it can be used as a viable alternative to motor fuel. It was observed that the yield was better in the case of individual plastic material as opposed to mixed feed in all cases except polypropylene under non-catalysed vacuum process.

**For more details download PDF file.**

**Keywords:** Plastic Pyrolysis Plant, Plastic to Oil, Pyrolysis (Plastic to Oil) Process, What is Pyrolysis? Pyrolysis Plant, Waste Plastic Pyrolysis Oil Process, Pyrolysis of Plastic Wastes, Waste Plastic Pyrolysis, Pyrolysis of Plastic to Oil, Pyrolysis of Plastic Pdf, Pyrolysis of Plastic Waste to Liquid Fuel, Plastic Pyrolysis Plant in India, Waste Plastic Pyrolysis Plant, Plastic Pyrolysis Plant Cost, Waste Plastic Pyrolysis Process, Plastic to Fuel, Pyrolysis of Waste Plastics into Fuels, Waste Plasti

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