





#1503

Fuels From Plastics

FUEL PRODUCTION BY THERMAL CRACKING OF WASTE PLASTICS

DESCRIPTION

Bench-scale thermal cracking (non-catalytic) process for liquid/gas fuel production from waste plastics. This technology offers an alternative for waste plastic disposal, yielding a fuel-like product (hydrocarbon cut). It is especially suited for contaminated plastics from herbicide/oil containers that are difficult or impossible to recycle by mechanical technologies. The cracking product is composed by a liquid fraction (paraffins, olefins, naphthenic, aromatics), a non-condensable flammable gas fraction and a small amount of solids residues (ash).

APPLICATIONS

Waste plastics: HDPE, LDPE, PP, PS.

ADVANTAGES

- Wide spectrum of operating conditions.
- Degradation / destruction of the contaminant by exposure at high temperature.

DEVELOPMENT STATUS

Operating unit tested with different plastic samples. Results already transferred to industrial clients.

RESEARCHERS

López, M. Pedernera, E. Adrover.