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(57) Abstract :
The present invention relates to a process (100) to prepare BHET bis(hydroxyethyl) terephthalate (BHET) monomer obtained from depolymerization of PET waste (Poly (ethylene terephthalate) using carbonated Zinc Titanium LDH (ZnTi-CO3) as catalyst and ethylene glycol (EG) as solvent. More particularly the process comprises the depolymerization of post consumed/waste PET into pure BHET monomer. The BHET as main product of PET recycling using EG can be used to produce various useful materials such as PET articles, bottle grade PET, polyurethane resins, unsaturated polyester resin, plasticizer or liquid crystalline polymers and chemicals of industrial applicability etc.

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