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(54) Title: PROCESS FOR PREPARING METHYL PHOSPHINIC ACID BUTYL ESTER

(57) Abstract: The present subject matter provides a safe alternative for producing an important intermediate useful for preparing the herbicide glufosinate, without need for chlorine components in the manufacturing process. In particular, a process for preparing alkyl phosphinic acid alkyl ester is provided, including the step of alkylating alkyl phosphinic acid ester in a non-polar solvent in the same apparatus as used to first produce the alkyl phosphinic acid ester, and without isolating the alkyl phosphinic acid ester before the alkylation step is conducted. More specifically, a process is presented for preparing methyl phosphinic acid butyl ester, by alkylating butyl phosphinic acid ester in a non-polar solvent, in the same apparatus as used previously to first produce the butyl phosphinic acid ester and without isolating the butyl phosphinic acid ester before alkylation.

