

ABSTRACT**PROCESS FOR THE PURIFICATION OF A C₂ TO C₄ CARBOXYLIC ACID AND/OR ANHYDRIDE HAVING HALIDE IMPURITIES**

A process for the purification of a C₂ to C₄ carboxylic acid and/or an anhydride thereof having halide impurities, which process comprises the steps of (a) exposing the impure acid and/or anhydride to electromagnetic radiation under conditions of intensity, wavelength and temperature, and for a time, sufficient to convert at least a portion of the halide impurities to lower - and/or higher-boiling halide components and (b) separating the lower - and/or higher-boiling halide components formed in step (a) from the C₂ to C₄ carboxylic acid and/or anhydride.

Also a process for the purification of a C₂ to C₄ carboxylic acid and/or an anhydride thereof prepared by a carbonylation process, the acid and/or anhydride thereof having non-halide, non-acidic and/or non-anhydride impurities, which process comprises the steps of (a) exposing the impure acid and/or anhydride to electromagnetic radiation under conditions of intensity, wavelength and temperature, and for a time, sufficient to convert at least a portion of the non-halide, non-acidic and/or non-anhydride impurities to lower- and/or higher-boiling non-halide, non-acidic and/or non-anhydride components and (b) separating the lower- and/or higher-boiling non-halide, non-acidic and/or non-anhydride components formed in step (a) from the C₂ to C₄ carboxylic acid and/or anhydride.

No Figure.