

ABSTRACT

PROCESS FOR THE PURIFICATION OF ACRYLIC ACID OBTAINED BY
CATALYTIC OXIDATION OF PROPYLENE

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Acrylic acid obtained by catalytic oxidation of propylene, extracted by countercurrent washing of the reaction gases with at least one hydrophobic heavy solvent in an extraction column (C1) is purified. To this end, a distillation of the stream (5) obtained at the bottom of the column (C1) is conducted in a column (C3) so as to obtain a very pure acrylic acid stream (6) at the top of the column (C3), allowing acrylic acid to pass at the bottom (7); the bottom stream (7) is conveyed as feed into the lower part of a distillation column (C4) from which a stream (9) rich in maleic anhydride and impurities of boiling temperatures situated between that of acrylic acid and that of the heavy solvent is drawn off sideways on a tray situated between the feed and the top of the column; a stream (8) rich in acrylic acid, which is returned as feed to the column (C3) is distilled at the top of the column (C4); and a stream (1) containing heavy solvent and heavy impurities, which is recycled to the top of the column (C1), is recovered at the bottom of the column (C4).

Figure to be published: single Figure.