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(54) Title: PURIFICATION OF PROPYLENE OXIDE

(57) Abstract: The invention is a method of purifying propylene oxide containing acetone, water, methanol, methyl formate, aldehydes, and hydrocarbons impurities. The method comprises contacting the propylene oxide with a glycol and a C₇ or greater alkane in a liquid/liquid solvent extraction, and separating propylene oxide having reduced impurities content. The purified propylene oxide may be produced by reacting propylene and a hydroperoxide to produce a crude propylene oxide effluent, distilling the crude effluent to produce a propylene oxide stream which contains 1-5 weight percent of the impurities, contacting the propylene oxide stream with a glycol and a C₇ or greater alkane in a liquid/liquid solvent extraction, then separating an alkane fraction comprising propylene oxide from a glycol fraction, and distilling the alkane fraction in one or more steps to produce an alkane bottoms stream and a propylene oxide product having less than 0.1 weight percent impurities.



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