

Title (en)
PREPARATION OF ALKANESULFONYL HALIDES AND ALKANESULFONIC ACIDS

Publication
EP 0331864 B1 19930331 (EN)

Application
EP 89100154 A 19890105

Priority
US 16459988 A 19880307

Abstract (en)
[origin: EP0331864A1] A continuous method is provided for preparing alkanesulfonyl halides, particularly chlorides and alkanesulfonic acids in high yields without the formation of undesirable side-products, and without the net production of hydrogen chloride as a by-product. The method involves the continuous electrolysis of an alkanethiol (RSH) or dialkyl disulfide (RSSR min) in an aqueous hydrochloric acid-containing solution, continuously removing the electrolyzed product mixture from the electrolysis zone, and recovering the alkanesulfonyl chloride (RSO₂Cl) or alkanesulfonic acid (RSO₃H) product from the mixture. The alkyl groups in the dialkyl disulfide (R and R min) may be straight or branched chain, substituted or unsubstituted, have 1 to 20 carbon atoms, preferably 1 to 12 carbon atoms, and may be different, but are preferably the same. The aqueous hydrochloric acid-containing medium and any unreacted sulphur compounds may be recycled through the electrolysis chamber.

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