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Dimephosphon, a new Phosphorus-Containing Medical Drug for Treatment of Acidosis: Chemistry and Technology

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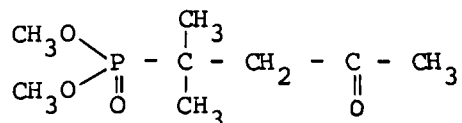
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DIMEPHOSPHON, A NEW PHOSPHORUS-CONTAINING MEDICAL DRUG FOR TREATMENT OF ACIDOSIS: CHEMISTRY AND TECHNOLOGY

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Medical drug dimephosphon - dimethyl 1,1-dimethyl-3-oxobutylphosphonate was created as a result of chemical and biological investigations of low-toxic organophosphorus compounds. This drug was selected from a number of acyclic



transformation products of 1,2-oxyphospholene derivatives. A technology was worked out which is based on the Pudovik reaction and transformed into the continuous process. For this process an original continuous flow reactor has been created.

Dimephosphon is an antiacidosis medical drug. Its chemical structure and action mechanism have no analogs among drugs used for the acid-alkali balance normalization. Dimephosphon is recommended in case of pneumonia, acute respiratory diseases, the influenza and infectious chronic non-specific pulmonary diseases, diabetes mellitus, in the post-operative period, and other pathologic processes accompanied by acidosis.