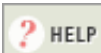


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Abstract: This review summarizes the recent research on a new application with boronic acids, namely their ability to act as transport carriers in bulk, liquid organic membranes. To date, boronic acids have been shown to facilitate the transport of reducing monosaccharides, ribonucleosides, aryl glycosides, catecholamines, cy-amino acids, and riboflavin. The transport can either be passive (down a solute concentration gradient) or active (against a solute concentration gradient). The various chemical mechanisms for boronic acid mediated transport are described, as well as the chemical and physical Factors that control transport rates.

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