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5.6 Quantification of concentration polarisation5.6.1 Osmotic pressure-controlled model; 5.6.2 Gel layer controlling model; 5.7 Applications of membrane-based processes; 5.7.1 Reverse osmosis; 5.7.2 Nanofiltration; 5.7.3 Ultrafiltration; 5.7.4 Microfiltration; References; 6 State of the art of stevioside processing using membrane-based filtration; 6.1 Clarification and purification; 6.2 Concentration by nanofiltration; 6.3 Limitations; References; 7 Detailed membrane-based technologies for extraction of stevioside; 7.1 Outline of processing; 7.2 Optimisation of water extraction process
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Sommario/riassunto

Stevioside is one of the naturally occurring sweeteners, belonging to the diterpene glycoside family, which can be widely applied in food, drinks, medicine and consumer chemicals. It is a good dietary supplement, being non-calorific, thermally stable, non-toxic, with a sugar-like taste profile, and suitable for diabetics, phenylketonuria patients and the obese. It is also non-fermentable, and exhibits anti-carcinogenic, antioxidant and anti-hyperglycemic properties. Stevioside tastes about 300 times sweeter than 0.4% sucrose solution. Thus, it offers a reasonably rare combination of health