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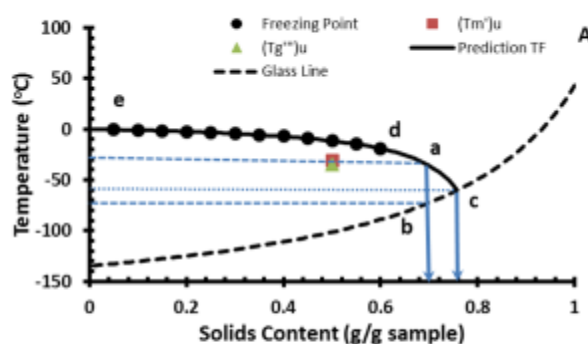
Thermal Characteristics and State Diagram of Freeze-Dried Broccoli: Freezing Curve, Maximal-Freeze-Concentration Condition, Glass line and Solids-Melting

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Graphical abstract



HIGHLIGHTS

- State Diagram of freeze-dried broccoli was developed
- Measuring and modelling of moisture sorption isotherm of freeze-dried broccoli at different temperatures
- Glass transition measurement and modelling with Gordon-Taylor equation (freeze-dried broccoli with un-freezable water)
- Measuring and modelling of solids-melting characteristics using Flory-Huggins model
- Freezing Point data were measured and modelled using Chen's model

ABSTRACT

Stability of foods during processing and storage can be determined from their phase and state diagrams. In this study, state diagram of broccoli was developed considering freezing curve, glass

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