

■ AquaSorp Isotherm Generator

Decagon Devices, Inc.

Pullman, Washington, USA

509-332-2756, www.decagon.com/isotherm

Decagon Devices' new AquaSorp Isotherm Generator instrument makes quick and automatic determination of moisture sorption isotherms. The AquaSorp Isotherm Generator directly measures water activity using Decagon's patented chilled mirror dew point technique. A moisture sorption isotherm for a product is the relationship between water activity (a_w) and moisture content at a given temperature. This relationship is complex and unique for each product due to different interactions between the water and the solid components at different moisture contents. The AquaSorp is simple to use: insert a sample into the instrument, set a few parameters for the experiment, and walk away. Desorption and adsorption curves are achieved by flowing wet or dry air, respectively, and moisture loss and gain are determined by weight changes. The instrument generates the complete absorption and desorption isotherms in approximately 24 hours with greater than 50 points on each isotherm curve.

