

Real View DSC of Pharmaceuticals, Salicin

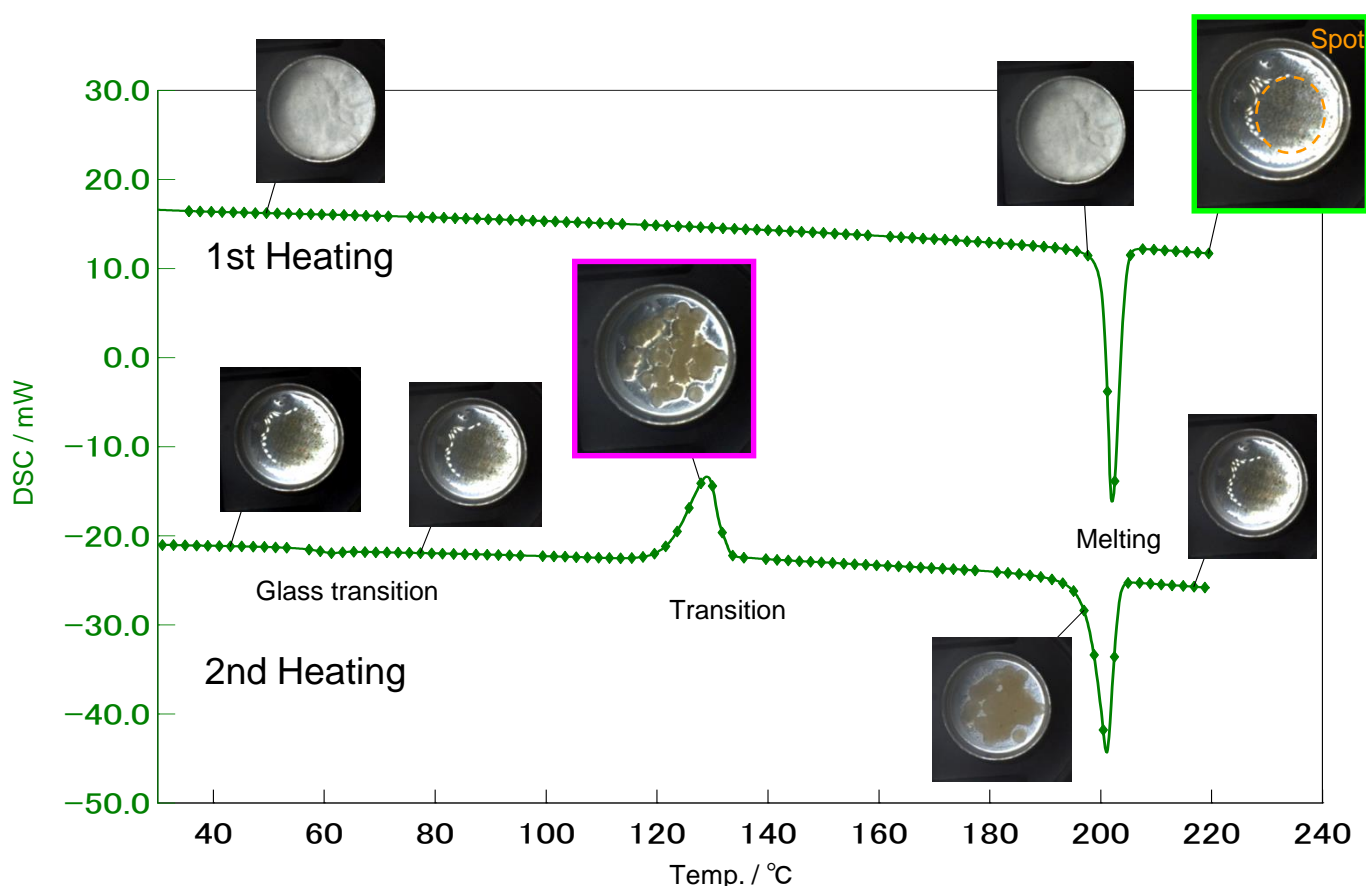
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Salicin is an ingredient contained in the bark of White Willow. Salicylic acid which is the decomposition product of salicin has analgesic action. Since its bitter taste is strong, aspirin is more popular. However, recently salicin draw attention as a herb of vegetable origin and it is taken to improve lumbago, and rheumatoid arthritis.

Salicin is measured using Real View DSC which typically only shows melting.



Results



Since the crystallinity of salicin is nearly 100%, glass transition is not observed at the 1st heating and only an endothermic peak is observed at around 200°C. The white powder changes into yellow liquid with some spots. (See image with green frame)

The 2nd Heating is done after cooling the melted sample. Since the sample is in the glassy state, glass transition is observed at around 60°C; however, the sample's appearance does not change. An exothermic peak by transition at around 130°C is observed and the sample becomes granular. Same as the 1st Heating, finally the sample changes into yellow liquid by melting.