Use of Starch as a Carrier Material for Liquid Ingredients

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Summary

In many industries ingredients in a dry powder are preferred over a liquid form. This is especially the case for flavours. In addition, certain flavours are being encapsulated to be protected against oxidation or evaporation. Two traditional processes used in the flavour industry are spray-drying and plating. Both processes will be described with their specific disadvantages and advantages. We recently developed Starrier R, a new starch based carrier. Starrier R can be used as carrier for liquid ingredients, and is having clear benefits in the encapsulation of flavours, in particular. Starrier R is a pregelatinized starch with an excellent absorption capacity for all liquids thanks to its unique flake shape and particle size. It can be used to convert liquids and oils into free flowing powders by a simple blending operation. The liquids are entrapped inside the porous structure of the carrier by an absorption mechanism. The new technology making use of Starrier R is compared with a conventional spray-drying process and with plating on traditional carriers like maltodextrin. Advantages of the Starrier R technology are a significant cost saving, a high loading (up to 60%), no formation of off-flavours, no loss of volatile flavour notes during manufacturing and a controlled release of the flavour.

Beamer-Presentation shown at the meeting.

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