

عنوان مقاله:

MANUFACTURING OF CHEKIDEH (CONCENTRATED YOGURT) BY ULTRAFILTRATION AND COMPARE ITS PROPERTIES WITH THE OTHER PRODUCTION METHODS

محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 6

نویسندگان:

B TADAYON SAEEDI - *Chemical and Petroleum Engineering Faculty, Sharif University of Technology Azadi Ave., Tehran, Iran, Islamic Republic of Iran*

Dr. R. ROOSTA AZAD - *Chemical and Petroleum Engineering Faculty, Sharif University of Technology Azadi Ave., Tehran, Iran, Islamic Republic of Iran*

خلاصه مقاله:

Chekideh is a semisolid product that is produced by concentrating milk/yogurt to approximately 23% total solids (w/v) by many methods such as the traditional cloth bag, ultrafiltration and direct reconstitution. Ultrafiltration membrane processing is carried out either before or immediately after fermentation. The effect of storage time on the flow properties of concentrated yogurt (chekideh) was investigated using a stress controlled rheometer. Experiments were performed at 25°C after 0, 2, 5 and 14 days after production. The apparent viscosity of fresh sample was then measured as a function of shear rate. For a given shear rate, the apparent viscosity was measured as a function of shearing time. The increase in the apparent viscosity of fresh chekideh with storage time is attributed to the further development of the gel structure occurred. It was also found that, chekideh samples exhibited shear-thinning and thixotropic behaviours with different storage times. The shear-thinning behaviour is fitted well by the power-law model, and the effect of temperature on the power-law parameters was determined. The thixotropic behaviour of chekideh was modelled using the second order structural kinetic approach. In general, ultrafiltration of warm, fermented milk is a promising treatment for the manufacture of good quality chekideh.

کلمات کلیدی:

Chekideh, Ultrafiltration, Shear-thinning, Thixotropic, Dynamic Rheology

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/77901>

