

## عنوان مقاله:

Effect Of Drying Conditions On Properties Of Dried Sugar Beet

## محل انتشار:

دوازدهمین کنگره ملی مهندسی شیمی ایران (سال: 1387)

تعداد صفحات اصل مقاله: 10

## نویسندگان:

M Mohammadzadeh - *Department of Chemical Engineering, University of Isfahan, Isfahan*

M.S Hatamipour - *Department of Chemical Engineering, University of Isfahan, Isfahan*

## خلاصه مقاله:

Drying behavior of sugar beet was investigated in a bench scale fluidized bed dryer with energy carrier (3 mm glass beads) and a freeze dryer. The effect of type of dryer (fluidized bed dryer & freeze dryer) on the rate of drying and properties of dried sugar beet were studied. It was found that drying should be useful for storage of sugar beet for a long time before processing, but removal of more than 90% of its initial water content is necessary for the dried sugar beet to conserve its sugar content and other properties during storage. The results of experiments in two different dryers showed that drying time in fluidized bed dryer with energy carriers is much less than that of freeze dryer, but the dried matter obtained by freeze dryer has a better appearance in comparison to others. Also the shrinkage of drying material with change of moisture content was investigated. The results are useful for mathematical modeling of the process.

## کلمات کلیدی:

Freeze dryer, Fluidized bed hot air dryer, Sugar beet, Heat carrier, Shrinkage

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/57701>

