

# Author's Accepted Manuscript

Modification of solid-state property of sulfasalazine  
by using the supercritical antisolvent process

Wei-Yi Wu, Chie-Shaan Su



[www.elsevier.com/locate/jcrysgr](http://www.elsevier.com/locate/jcrysgr)

PII: S0022-0248(16)30874-0

DOI: <http://dx.doi.org/10.1016/j.jcrysgr.2016.12.017>

Reference: CRY23876

To appear in: *Journal of Crystal Growth*

Received date: 30 June 2016

Revised date: 24 November 2016

Accepted date: 4 December 2016

Cite this article as: Wei-Yi Wu and Chie-Shaan Su, Modification of solid-state property of sulfasalazine by using the supercritical antisolvent process, *Journal of Crystal Growth*, <http://dx.doi.org/10.1016/j.jcrysgr.2016.12.017>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Modification of solid-state property of sulfasalazine by using the supercritical antisolvent process

Wei-Yi Wu, Chie-Shaan Su\*

Department of Chemical Engineering and Biotechnology  
National Taipei University of Technology, Taipei, Taiwan

\*: Corresponding author:

E-mail: cssu@ntut.edu.tw

Address: 1, Sec. 3, Zhongxiao E. Rd., Taipei 10608 Taiwan

## Abstract

In this study, the supercritical antisolvent (SAS) process was used to recrystallize an active pharmaceutical ingredient, sulfasalazine, to modify the solid-state properties including particle size, crystal habit and polymorphic form. Supercritical CO<sub>2</sub> and tetrahydrofuran were used as the antisolvent and solvent, respectively. SAS results obtained from different operating temperatures (35, 45, 55 and 65 °C) were compared and discussed. The results indicate that at 55 °C, spherical sulfasalazine crystals were produced and that their mean particle size was micronized to

Download English Version:

<https://daneshyari.com/en/article/5489684>

Download Persian Version:

<https://daneshyari.com/article/5489684>

[Daneshyari.com](https://daneshyari.com)