Accepted Manuscript

Title: Thermodynamic Modeling of the System of CO₂ and Potassium Taurate Solution for Simulation of the Carbon Dioxide Capture Process

Authors: Stefania Moioli, Minh T. Ho, Dianne E. Wiley, Laura A. Pellegrini

 PII:
 S0263-8762(18)30327-7

 DOI:
 https://doi.org/10.1016/j.cherd.2018.06.032

 Reference:
 CHERD 3242

To appear in:

 Received date:
 26-3-2018

 Revised date:
 20-6-2018

 Accepted date:
 22-6-2018

Please cite this article as: Moioli, Stefania, Ho, Minh T., Wiley, Dianne E., Pellegrini, Laura A., Thermodynamic Modeling of the System of CO2 and Potassium Taurate Solution for Simulation of the Carbon Dioxide Capture Process.Chemical Engineering Research and Design https://doi.org/10.1016/j.cherd.2018.06.032

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 proof before it is published in its final 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.



ACCEPTED MANUSCRIPT

Thermodynamic Modeling of the System of CO₂ and Potassium Taurate Solution for Simulation of the Carbon Dioxide Capture Process

Stefania Moioli^{a,b}, Minh T. Ho^b, Dianne E. Wiley^b, Laura A. Pellegrini^a

^aGASP, Group of Advanced Separation Processes and GAS Processing Dipartimento di Chimica, Materiali e Ingegneria Chimica "G. Natta", Politecnico di Milano, Piazza Leonardo da Vinci 32, I-20133 Milano, Italy ^bThe University of Sydney, School of Chemical and Biomolecular Engineering, NSW 2006, Australia

Corresponding Author: Stefania Moioli (stefania.moioli@polimi.it)

Highlights

- Removal of CO₂ by chemical absorption with potassium taurate aqueous solution;
- description of the Vapor-Liquid-Solid Equilibrium in presence of chemical reactions;
- model developed in ASPEN Plus[®], properly user customized;
- species not present by default in the database and thermodynamic parameters added;
- no other works in literature dealing with such modeling of this system are present.

Download English Version:

https://daneshyari.com/en/article/7005672

Download Persian Version:

https://daneshyari.com/article/7005672

Daneshyari.com