Accepted Manuscript

PII:

Title: Chlorpheniramine recovery from aqueous solutions by emulsion liquid membranes using soy lecithin as carrier

Authors: Teresa Alejandra Razo-Lazcano, María del Pilar González-Muñoz, Moncef Stambouli, Dominique Pareau, Liliana Hernández-Perales, Mario Ávila-Rodríguez

Emana Hemandez-Feraics, Mario Avna-Rodriguez

DOI: http://dx.doi.org/doi:10.1016/j.colsurfa.2017.07.050

S0927-7757(17)30699-4

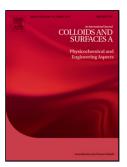
Reference: COLSUA 21824

To appear in: Colloids and Surfaces A: Physicochem. Eng. Aspects

Received date: 2-10-2016 Revised date: 14-7-2017 Accepted date: 14-7-2017

Please cite this article as: {http://dx.doi.org/

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

CHLORPHENIRAMINE RECOVERY FROM AQUEOUS SOLUTIONS BY EMULSION LIQUID MEMBRANES USING SOY LECITHIN AS CARRIER.

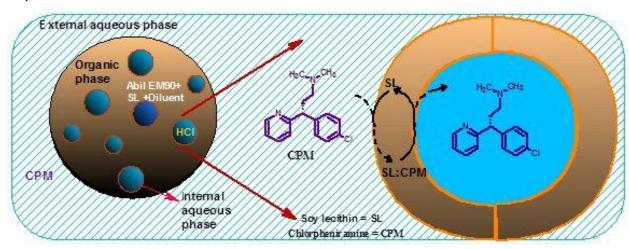
Teresa Alejandra Razo-Lazcano^a, María del Pilar González-Muñoz^a, Moncef Stambouli^b, Dominique Pareau^b, Liliana Hernández-Perales^a, Mario Ávila-Rodríguez^{a,*}

^aUniversidad de Guanajuato, Chemistry Department, Cerro de la Venada S/N, Pueblito de Rocha, 36040, Guanajuato, Mexico. Email: teresarazo@ugto.mx; gomupi@ugto.mx; lhperales@gmail.com; avilam@ugto.mx

^bCentrale Supélec, Laboratoire "Génie des Procédés et Matériaux", Grand Voie, Châtenay-Malabry, 92295, Paris, France. Email: moncef.stambouli@ecp.fr; dominique.pareau@ecp.fr

*Corresponding author. Universidad de Guanajuato, Chemistry Department, Cerro de la Venada S/N, Pueblito de Rocha, 36040, Guanajuato, Mexico. Email: avilam@ugto.mx

Graphical abstract



Highlights.

- 1.- A recovery system of chlorpheniramine by Emulsion Liquid Membranes is proposed.
- 2.- Soy lecithin is a good carrier to perform the transfer of CPM through the ELM.
- 3.- The system composed of Abil EM90®, soy lecithin and HCl turned out be efficient.
- 4.- High recovery percentages of CPM and fast transfer rate were obtained.
- 5.- This application of ELM is a contribution to wastewater treatment.

Abstract.

Emulsion liquid membranes (ELMs) are a versatile and useful alternative for the recovery of emerging organic pollutants, such as pharmaceuticals, contained in wastewaters. These substances recently have provoked an environmental concern because of their growing detection in wastewater. In this study a methodology for CPM recovery from aqueous solutions by emulsion liquid membranes was developed, using non-toxic, natural products.

Download English Version:

https://daneshyari.com/en/article/6978122

Download Persian Version:

https://daneshyari.com/article/6978122

<u>Daneshyari.com</u>