

Accepted Manuscript

Title: Different alumina precursors in the preparation of supports for HDT and HDC of Maya crude oil

Authors: Patricia Rayo, Andrea Rodríguez-Hernández, Pablo Torres-Mancera, José Antonio D. Muñoz, Jorge Ancheyta, Roberto García de León



PII: S0920-5861(17)30861-1
DOI: <https://doi.org/10.1016/j.cattod.2017.12.034>
Reference: CATTOD 11186

To appear in: *Catalysis Today*

Received date: 8-8-2017
Revised date: 18-12-2017
Accepted date: 28-12-2017

Please cite this article as: Patricia Rayo, Andrea Rodríguez-Hernández, Pablo Torres-Mancera, José Antonio D. Muñoz, Jorge Ancheyta, Roberto García de León, Different alumina precursors in the preparation of supports for HDT and HDC of Maya crude oil, *Catalysis Today* <https://doi.org/10.1016/j.cattod.2017.12.034>

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.

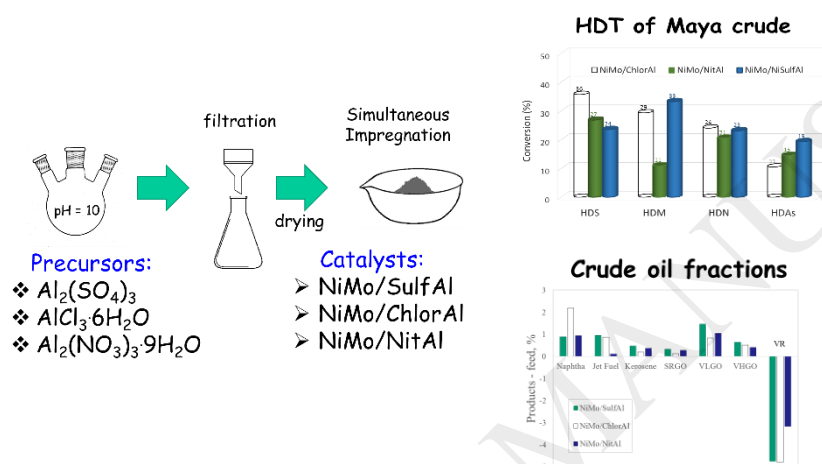
Different alumina precursors in the preparation of supports for HDT and HDC of Maya crude oil

Patricia Rayo*, Andrea Rodríguez-Hernández, Pablo Torres-Mancera, José Antonio D. Muñoz, Jorge Ancheyta, and Roberto García de León

Instituto Mexicano del Petróleo, Eje Central Lázaro Cárdenas Norte 152, México D.F.

07730. Email: prayo@imp.mx

Graphical abstract



Highlights

- Boehmite synthesis by hydrothermal route with three different precursor aluminum salts
- Different alumina precursor affects catalyst performance in hydrotreatment of Maya crude oil
- Good balance among catalytic properties obtained with aluminum chloride
- Poor active phase dispersion and high acidity by using aluminum sulfate
- Intermediate active phase dispersion and stacking and low acidity with aluminum nitrate

Abstract

Three different aluminum salts were used in the hydrothermal synthesis of boehmite. The salts employed were sulfate, chloride and nitrate. The prepared boehmites were calcined to obtain $\gamma\text{-Al}_2\text{O}_3$, then these supports were used to prepare NiMo/ $\gamma\text{-Al}_2\text{O}_3$ catalysts and their

Download English Version:

<https://daneshyari.com/en/article/6504549>

Download Persian Version:

<https://daneshyari.com/article/6504549>

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