

Accepted Manuscript

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Bruno Caram, Sara García-Ballesteros, Lucas Santos-Juanes, Antonio Arques, Fernando S. García-Einschlag



PII: S0045-6535(18)30082-1

DOI: [10.1016/j.chemosphere.2018.01.074](https://doi.org/10.1016/j.chemosphere.2018.01.074)

Reference: CHEM 20655

To appear in: *ECSN*

Received Date: 10 September 2017

Revised Date: 13 December 2017

Accepted Date: 15 January 2018

Please cite this article as: Caram, B., García-Ballesteros, S., Santos-Juanes, L., Arques, A., García-Einschlag, F.S., Humic like substances for the treatment of scarcely soluble pollutants by mild photo-Fenton process, *Chemosphere* (2018), doi: 10.1016/j.chemosphere.2018.01.074.

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1 Humic like substances for the treatment of scarcely 2 soluble pollutants by mild photo-Fenton process

3 Bruno Caram¹, Sara García-Ballesteros², Lucas Santos-Juanes*², Antonio Arques², Fernando S.
4 García-Einschlag¹,

5 1. Instituto de Investigaciones Fisicoquímicas Teóricas y Aplicadas (INIFTA), CCT-La Plata-
6 CONICET, Universidad Nacional de La Plata, Diag 113 y 64, La Plata, Argentina.

7 2. Grupo de Procesos de Oxidación Avanzada, Departamento de Ingeniería Textil y Papelera,
8 Campus de Alcoy, Universitat Politècnica de València. E-03801, Alcoy, Spain.

9 10 ABSTRACT

11 Humic-like substances (HLS) extracted from urban wastes have been tested as auxiliaries for
12 the photo-Fenton removal of thiabendazole (TBZ) under simulated sunlight. Experimental design
13 methodology based on Doehlert matrices was employed to check the effects of hydrogen
14 peroxide concentration, HLS amount as well as TBZ loading; this last parameter was studied in
15 the range 25-100 mg/L, to include values below and above the limit of solubility at pH = 5. Very
16 satisfactory results were reached when TBZ was above solubility if HLS and H₂O₂ amounts were
17 high. This could be attributed to an interaction of HLS-TBZ that enhances the solubility of the

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