

Title (en)
BIODEGRADATION OF ORGANIC CONTAMINANTS BY HALOPHILIC MICROORGANISMS UNDER NUTRIENT LIMITATION

Title (de)
BIOLOGISCHER ABBAU VON ORGANISCHEN VERUNREINIGUNGEN DURCH HALOPHILE MIKROORGANISMEN UNTER NÄHRSTOFFBEGRENZUNG

Title (fr)
BIODÉGRADATION DE CONTAMINANTS ORGANIQUES PAR MICRO-ORGANISMES HALOPHILES SOUS LIMITATION DE NUTRIMENTS

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Application
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Abstract (en)
[origin: EP4063331A1] The present invention relates to a method for reducing the content of at least one contaminant selected from the group consisting of nitrobenzene, formate, phenol, 4,4'-Methylenedianiline (MDA) and aniline in hypersaline wastewater under conditions, wherein at least one inorganic nutrient limits growth of said cells. In the method, a composition comprising hypersaline wastewater, microbial cells belonging to at least one genus selected from the group consisting of Haloferax, Halomonas, Aliifodinibius and Oceanobacillus and at least one contaminant is provided and incubated for the degradation of the contaminant. The composition is characterized by a growth-limiting concentration of at least one inorganic nutrient, in particular nitrogen and/or phosphor. The treated hypersaline wastewater is used for electrochemical production of chlorine and sodium hydroxide.

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