

Abstract:

The invention relates to the use of oil-in-water emulsions for reducing the air and/or oxygen demand of aerobic biological sewage treatment plants and/or for improving denitrification in aerobic biological sewage treatment plants. As a component of the oil phase, the emulsions include at least: saturated or unsaturated, open-chain or cyclic, normal or isomeric hydrocarbons with 8-30 carbon atoms; saturated or unsaturated fatty alcohols, a saturated or unsaturated fatty acid, fatty acid monoalkyl esters, fatty acid amides, or fatty acid monoalkylamides of saturated or unsaturated fatty acids, said fatty alcohols, fatty acids and fatty acid esters of the mentioned compounds having 8-30 carbon atoms; monoesters or polyesters of a saturated or unsaturated carboxylic acid or dicarboxylic acid with 4-30 carbon atoms with a monoalcohol and/or a polyol, with the exception of polyethyleneglycols; polyamides of saturated or unsaturated fatty acids having 8-30 carbon atoms with aliphatic polyamines having 2-6 nitrogen atoms; acyclic, preferably monocyclic and/or bicyclic terpenes, particularly terpene hydrocarbons and/or terpene alcohols and/or polyoxyalkylene compounds based on alkylene oxides and alkylene oxides with fatty alcohols and/or C₁₂-C₁₈ fatty acids and/or fatty acid glycerides of C₁₂-C₁₈ fatty acids.