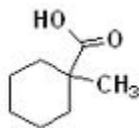
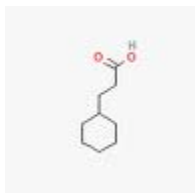


Naphthenic acids ($C_nH_{2n+2}O_2$),

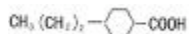
1-methylcyclohexanecarboxylic acid (Aldrich Chemical Co. Milwaukee, Wis.,)



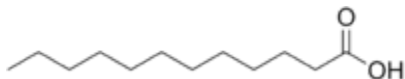
cyclohexanepropanoic acid (Aldrich Chemical Co. Milwaukee, Wis.,)



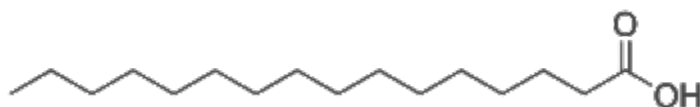
trans-1,4-pentylcyclohexanecarboxylic acid* (Aldrich Chemical Co. Milwaukee, Wis.,)



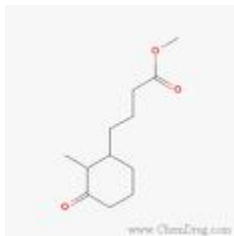
lauric acid (Aldrich Chemical Co. Milwaukee, Wis.,)



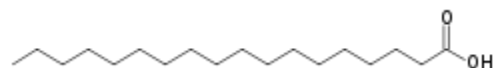
palmitic acid (Aldrich Chemical Co. Milwaukee, Wis.,)



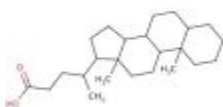
cyclohexanebutanoic acid (Aldrich Chemical Co. Milwaukee, Wis.,)



stearic acid (BDH Chemicals Ltd., Poole, England),



5[beta]-cholanic acid (Sigma Chemicals Co., St. Louis, Mo.).



*Some biodegradation studies used trans-1,4-pentylcyclohexanecarboxylic acid as a

model naphthenic acid.

Preparing Solutions

To facilitate dissolution, concentrated solutions of the naphthenic acids, sodium salts, or trans-1,4-pentylcyclohexanecarboxylic acid were prepared in 0.25 M or 0.1 M NaOH. Various concentrations of solutions in 0.25 M NaOH were diluted in modified Bushnell-Haas mineral salts medium (Wyndham and Costerton 1981) to prepare standards for calibration curves. Appropriate volumes of the concentrated solutions of naphthenic acids in 0.1 M NaOH were added to the culture medium for biodegradation studies.

Source

Joyce S Clemente, Tin-Wing Yen, & Phillip M Fedorak. (2003). Development of a high performance liquid chromatography method to monitor the biodegradation of naphthenic acids. *Journal of Environmental Engineering and Science*, 2(3), 177.