Amphiphilic quaternary ammonium salts (QAS) show biological activity and are widely used in many fields of industry, for example as disinfectants in pharmaceutical and cosmetic industries. When embedded into liposomes QAS made them cationic and able to transfer DNA into cells. Some of QAS are able to deliver DNA inside the cells even without a helper lipid [Fisicaro, E. et al. Biochem. Biophys. Acta (General Subjects) 1722 (2005) 224]. For these reasons and also due to the fact that surfactants are widely used as molecular tools in membranology, the solubilization study and especially determination of solubilization parameters ($R_{sat}$ and $R_{sol}$) are of great importance. $R_{sat}$ and $R_{sol}$ [Lichtenberg, D. Biochem. Biophys. Acta 821 (1985) 470] are the ratios of the surfactant concentration in the aggregates to the lipid concentration producing saturation and solubilization, respectively. In this paper we studied the solubilization of the phosphatidylcholine vesicles by commonly used dodecyltrimethylammonium halides (DTAX) by means of isothermal titration calorimetry (ITC). To this aim we titrated unilamellar DPPC liposomes suspensions of concentrations 1, 2, 5, 10, 20, 30 and 40 mM with DTAX solutions above critical micelle concentration. $R_{sat}$ and $R_{sol}$ parameters were calculated and schematic phase diagrams were drawn. The influence of counterion on solubilization process is discussed.