

عنوان مقاله:

DISPERSION DROP SIZE DISTRIBUTION IN THE PRESENCE OF ECO-FRIENDLY CATIONIC SURFACTANT

محل انتشار:

دومین کنفرانس بین المللی نفت، گاز و پتروشیمی (سال: 1393)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

In this work, drops size distribution of the toluene in water dispersion was studied. The effect of Cetyl Trimethyl Ammonium Bromide (CTAB) as an eco-friendly cationic surfactant on drop size was investigated. Furthermore, the influence of hydrodynamic parameter of dispersed phase volume fraction on drop distribution was examined. The experiments were performed in a single stage horizontal mixer-settler equipped with two series of 4-pitched blade turbine impellers with 45 blades on one shaft. Results demonstrated that introducing CTAB to the dispersions led to smaller drops and consequently, narrower and more uniform drops distribution. Additionally, presence of CTAB into system caused to about 29% averagely reduction in enhancing rate of mean drops size of dispersion with increasing .in dispersed phase volume fraction

کلمات کلیدی:

Drop Size Distribution, CTAB, Dispersed Phase Volume Fraction, Mixer-Settler

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