

## عنوان مقاله:

Estimation of critical property data of DMAE by group-contribution

## محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 4

## نویسندگان:

Sattar Sobhani - *Chemistry & Chemical Engineering Department, Faculty of Materials & Manufacturing Technologies, Malek Ashtar University of Technology, Tehran, Iran*

Shahram G.Pakdehi - *Chemistry & Chemical Engineering Department, Faculty of Materials & Manufacturing Technologies, Malek Ashtar University of Technology, Tehran, Iran*

## خلاصه مقاله:

Dimethyl Amino Ethyl Azide (DMAE) is a novel liquid fuel that recently is used in aerospace industries. The experimental methods of critical property data estimation, are unable to determined these data because this liquid fuel decompose at 300°C. Group contribution is one of the powerful tool to estimation of pure components. In this paper, GC methods revised and the most accurate methods selected by a simple comparison among known amines families. Then, critical properties of DMAE and acentric factor estimated. Finally, to approve of these results, liquid density calculated by three different equations of state and compared with experimental data. Results show that achieved critical property data are accurate considerably.

## کلمات کلیدی:

Critical Property Data, Group Contribution, DMAE, Liquid Fuel

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/77915>

