Distillation characteristics and compositional analysis of Arabian light straight run naphtha. Redwan, D. S.; Jaber, A. M. Y.. Research Institute, King Fahd University of Petroleum and Mineral, Dhahran, Saudi Arabia. Petroleum Science and Technology (1999), 17(9 & 10), 915-929. Publisher: Marcel Dekker, Inc., CODEN: PSTEFV ISSN: 1091-6466. Journal written in English. CAN 131:353420 AN 1999:721890 CAPLUS (Copyright (C) 2008 ACS on SciFinder (R))

Abstract

Straight run naphtha is a basic constituent of refined petroleum products. It consists mainly of aliph. hydrocarbons along with small amts. of naphthenic and arom. hydrocarbons. It has a wide boiling range between 95°F and 410°F. Currently, its main utilization is as gasoline blend, however, naphtha is a potential feedstock for the prodn. of various petrochems. Continuous catalytic reforming of naphtha can produce arom. compds. in amts. up to 70% of the reformat. Nevertheless, the catalytic reforming process is usually assocd. with various limitations that may be related to the wide-ranging compn. of naphtha. In this study straight run naphtha derived from Arabian Light crude oil was fractionated, and the hydrocarbon compn. of its different distn. cuts was detd. The straight run naphtha can be split into two main fractions. A light fraction boiling between 225°F and 335°F, consists mainly of C7(-) and a medium heavy fraction boiling between 225°F and 335°F, consists mainly of c7(+). Detailed distn. characteristics, along with compositional anal. of SRN seems to be useful for diversifying its processing technologies, and upgrading currently applied processing practices to yield various high-value products and petrochems. feed stocks.