Corrosion inhibition in distillation towers of petroleum using organic in hibitors

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1. The aim of the present workwas to prepare organic corrosion inhibitors for overhead distillation towers of petroleumprocessing, rr omsomelocal cheap raw materials, and to evaluate themunder conditions whf.chare not far removed from those prevailing in pratice, Various mechanismshave been suggested to correlate the molecular structure of organic inhibitors with their inhibiting efficiency c learl y Theproblem is still far from beingestablished.Themain themeof the present workwas th’llLs,the correlation between the structure of the prepared inhibitol’13and their efficiency. Percentage inhibi.tion as high as 92%could be achieved both in the liquid and gas phases Amechanismhas been suggested based en, the availability of the unshared pair of electrons on the nitrogen atoms in the molecule, as well as the branching of the molecule.2. The literature surveycovered the types of inhibitors used for corrosion inhibition in refineries, methodsof preparations, theories of inhibition mechanisms, and faotors et’:feC1;inginhibi”tors Ufici.enoy!.3. The experim.entaJ.par”t includes all ”the de”tails abou:liappara”tus, methodsof preparat;ions~ ana;!.ysisand evalu.