

METHOD FOR PURIFICATION OF PHENOLABSTRACT

5 The invention relates to a method for purification
of phenol and specifically to a method for purification
of phenol produced within the process of joint phenol and
acetone production by cumene method.

10 The aim of the invention is to develop a catalyst
which has high activity for phenol purification from
organic micro-impurities with regeneration of the catalyst
and which has high mechanical strength and stability with
long catalyst life.

15 This result is obtained by phenol purification using
a heterogeneous zeolite catalyst. The acidity of the
catalyst measured by butane cracking (K_A) is more than 10.

20 Phenol derived from distillation of heavies and
lights and still containing impurities i.e.,
hydroxyacetone, mesityl oxide, &-methylstyrene, 2-
methylbenzofurane and other carbonyl compounds and not
containing water (water content not more than 1 wt%,
preferably less than 0.1 wt%) contacts the zeolite
catalyst at a temperature between about 120 to 250°C
(preferably 180 to 200°C) and space velocities 0.1-3.5
25 hr^{-1} (preferably 0.8-1.2 hr^{-1}).

30 It has been discovered that said purification
results in conversion of such impurities as mesityl
oxide, hydroxyacetone, &-methylstyrene and other carbonyl
compounds of not less than 90%.

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