

## Process for Nitrobenzene

This technology is a novel catalytic chemical process for the manufacture of nitrobenzene by vapor phase nitration of benzene with dilute nitric acid using a solid acid catalyst. It represents a green chemistry technology and should be commercially viable as well. In this process, benzene is nitrated using dilute nitric acid over solid acid catalyst in the vapor phase. Nitrobenzene is formed in high yields and no byproducts such as sulfuric acid are formed in the reaction.

### **Salient Features**

- Reduces the raw materials required in the process
- Reduction of technical stages required for the process
- Elimination of the concentration stage
- No sulfuric acid handling and disposal hazards.

### **Major Application / End Users**

- This technology would be of particular interest to the petrochemical industry, particularly operations involved in the production of aniline.