molecular weight polyethylenepolyamines are cracked by the same catalysts to mixtures of lower molecular weight linear and cyclic materials.

OXIDATION CATALYSIS

5543472

CONCURRENT EPOXIDATION AND CATALYST RESIDUE EXTRACTION

Stevens Craig; Rao Bhaskar P; Veith Cary A; Erickson James R Houston, TX, UNITED STATES assigned to Shell Oil Company

A process for the concurrent epoxidation of, and catalyst residue extraction from, anionically polymerized diene-containing polymers which have been hydrogenated using a Group VIII metal catalyst, said process comprising: (a) introducing a catalyst residue-containing diene-containing polymer cement into a reactor, (b) heating the polymer cement to a temperature of 25° to 65°C, (c) contacting the polymer cement with a caustic solution, (d) contacting the polymer cement with a peracid solution, (e) mixing the polymer, caustic, and acid at 25° to 65°C for 1/2 to 3 hours, (f) optionally adding sufficient caustic solution to neutralize excess acid while continuing the mixing, (g) adding sufficient water such that the aqueous/organic phase weight ratio is from 0.2:1 to 1:1 while continuing the mixing, (h) allowing the phases to settle for 5 to 90 minutes, (i) removing the aqueous phase from the reactor, (j) optionally repeating steps (g), (h), and (i) until the catalyst residue contents are less than 10 ppm, and (k) removing the polymer cement from the reactor and removing the solvent to recover the epoxidized polymer.

5543532

CATALYST AND METHOD FOR VAPOR PHASE OXIDATION OF ALKANE HYDROCARBONS

Kourtakis Kostantinos; Sonnichsen George C Hockessin, DE, UNITED STATES assigned to E I Du Pont de Nemours and Company

This invention relates to cation substituted catalysts based primarily upon vanadium pyrophosphate, useful in the oxidation of alkane hydrocarbons.

5550093

PREPARATION OF SUPPORTED GOLD CATALYSTS FOR CARBON MONOXIDE OXIDATION

Wan Ben-Zu; Kang Yih-Ming Taipei, CHINA (TAIWAN) assigned to National Science Council

This invention relates to the preparation of supported gold catalysts for carbon monoxide oxidation. The supported gold catalysts were obtained by cation exchange of gold ion into ion exchangeable supports. After being heated in a stream of humidified inert gas at an elevated temperature, the resultant catalysts possess not only high catalytic activities for carbon monoxide oxidation but also good water-durability.