Claims

1. A catalyst composition which comprises a carrier material component and a metal(s) component that is supported on the carrier material component, wherein the carrier material component comprises (i) a ZSM-12 type zeolite in an amount of from 2 to 20 %wt, based on total weight of carrier material, the ZSM-12 type zeolite having a silica to alumina molar ratio in the range of from 60 to 200;
(ii) a EU-1 type zeolite in an amount of from 2 to 30 %wt, based on total weight of carrier material, the EU-1 type zeolite having a silica to alumina molar ratio in the range of from 20 to 200; and an inorganic binder in an amount in the range of from 55 to 96 %wt, based on total weight of carrier material; and wherein the metal(s) component comprises a group VIII metal in an amount of at least 0.01 %wt, based on total weight of catalyst.

2. The catalyst according to claim 1, wherein the ZSM-12 type zeolite is present in an amount in the range of from 2 to 15 %wt, based on total weight of carrier material.

3. The catalyst according to claim 1 or 2, wherein the EU-1 type zeolite is present in an amount in the range of from 2 to 24 %wt, based on total weight of carrier material.

4. The catalyst according to any one of claims 1-3, wherein the inorganic binder is present in an amount in the range of from 70 to 95 %wt, based on total weight of carrier material.

5. The catalyst according to any one of claims 1-4, wherein the inorganic binder consists of alumina.

6. The catalyst according to any one of claims 1-5, wherein the Group VIII metal is platinum which is present in an amount in the range of from 0.1 to 0.6 %wt, based on total weight of catalyst.

7. The catalyst according to any one of claims 1-6, wherein the ZSM-12 type zeolite has a silica to alumina molar ratio in the range of from 70 to 150.

8. The catalyst according to any one of claims 1-7, wherein the EU-1 type zeolite has a silica to alumina molar ratio in the range of from 30 to 95.

9. The catalyst according to any one of claims 1-8, wherein the ZSM-12 type zeolite has an average particle size in the range of from 5 to 50 nm.

10. The catalyst according to any one of claims 1-9, wherein the EU-1 type zeolite has an average particle size in the range of from 20 to 70 nm.

11. A process for preparing the catalyst according to any one of claims 1-10, comprising the steps of:

    (a) mixing the ZSM-12 type zeolite, the EU-1 type zeolite, the inorganic binder, and Group VIII metal in any possible sequence; and
    (b) calcining the mixture as obtained in step (a).

12. A process for the isomerisation of alkylaromatics comprising contacting a hydrocarbon feedstock which comprises alkylaromatics with a catalyst as defined in any one of claims 1-10.

13. The process according to claim 12, wherein the feed comprises ethylbenzene and xylenes.