Claims

1. A catalytic system comprising a catalyst comprising a titanium zeolite of structure type MWW optionally comprising zinc, preferably a titanium zeolite of structure type MWW comprising zinc, and at least one potassium salt, wherein the at least one potassium salt is selected from the group consisting of at least one inorganic potassium salt, at least one organic potassium salt, and combinations of at least one inorganic potassium salt and at least one organic potassium salt, wherein preferably at least one of the at least one potassium salt is an organic potassium salt.

2. The catalytic system of claim 1, wherein the at least one potassium salt is selected from the group consisting of at least one inorganic potassium salt selected from the group consisting of potassium hydroxide, potassium chloride, potassium nitrate, at least one organic potassium salt selected from the group consisting of potassium formate, potassium acetate, potassium carbonate, and potassium hydrogen carbonate, and a combination of at least one of the at least one inorganic potassium salts and at least one of the at least one organic potassium salts, the at least one potassium salt preferably comprising potassium formate, potassium acetate, or a mixture thereof, preferably potassium formate.

3. The catalytic system of claim 1 or 2, wherein the titanium zeolite of structure type MWW optionally comprising zinc which is comprised in the catalyst contains titanium, calculated as elemental titanium, in an amount in the range of from 0.1 to 5 weight-%,

preferably from 1 to 2 weight-%, based on the total weight of the titanium zeolite of framework structure type MWW optionally comprising zinc, and optionally contains zinc, calculated as elemental zinc, in an amount in the range of from 0.1 to 5 weight-%, preferably from 1 to 2 weight-%, based on the total weight of the titanium zeolite of framework structure type MWW optionally comprising zinc.

4. The catalytic system of any of claims 1 to 3 for the epoxidation of propene.

5. The catalytic system of any of claims 1 to 4, being obtainable or obtained by

(i') providing a liquid feed stream comprising propene, hydrogen peroxide, acetonitrile, water, optionally propane, the at least one, dissolved, potassium salt, wherein in (i'), the molar ratio of potassium relative to hydrogen peroxide in the liquid feed stream is preferably in the range of from $5x10^{-6}$:1 to $1000x10^{-6}$:1, preferably from $25x10^{-6}$:1 to $500x10^{-6}$:1, more preferably from $50x10^{-6}$:1 to $250x10^{-6}$:1;

(ii') passing the liquid feed stream provided in (i') into an epoxidation reactor comprising the catalyst comprising a titanium zeolite of structure type MWW optionally comprising zinc, wherein in (ii'), the liquid feed stream is preferably subjected to epoxidation reaction conditions in the epoxidation reactor, obtaining a reaction mixture comprising propylene oxide, acetonitrile, water, the at least one, potassium salt, optionally propene, and optionally propane.

6. Use of at least one potassium salt as an additive for a titanium zeolite of framework structure type MWW optionally comprising zinc, preferably for a titanium zeolite of framework structure type MWW comprising zinc, in a preferably continuous process for the preparation of propylene oxide, preferably in acetonitrile as solvent, and preferably with hydrogen peroxide as epoxidation agent.

7. The use of claim 6, wherein the at least one potassium salt is selected from the group consisting of at least one inorganic potassium salt preferably selected from the group consisting of potassium hydroxide, potassium halides, potassium nitrate, potassium sulfate, potassium hydrogen sulfate, potassium perchlorate, at least one organic potassium salt preferably selected from the group consisting of potassium salts of aliphatic saturated monocarboxylic acids preferably having 1, 2, 3, 4, 5 or 6 carbon atoms, potassium carbonate, and potassium hydrogen carbonate, and a combination of at least one of the at least one inorganic potassium salts and at least one of the at least one organic potassium salts, wherein preferably at least one of the at least one potassium salt is an organic potassium salt.