CLAIMS

1. An olefin production method, comprising a step of catalytically cracking a raw material containing at least a polyolefin and an organochlorine compound in the presence of a zeolite catalyst having a sodium atom content of less than 0.1% by mass, wherein the raw material has a chlorine atom content of 10% by mass or less.

2. The olefin production method according to claim 1, wherein the zeolite catalyst is an MFI zeolite catalyst.

3. The olefin production method according to claim 1 or 2, wherein the zeolite catalyst has a Si/Al ratio of 100 or more.

4. The olefin production method according to claim 1 or 2, wherein the zeolite catalyst has a Si/Al ratio of 300 or more.

5. The olefin production method according to claim 1, wherein the olefins are olefins having 2 to 3 carbon atoms.

6. The olefin production method according to any one

of claims 1 to 5, wherein the zeolite catalyst has a sodium atom content of less than 0.05% by mass.

7. The olefin production method according to any one of claims 1 to 6, wherein the organochlorine compound contains at least one of polyvinyl chloride and polyvinylidene chloride.

8. The olefin production method according to any one of claims 1 to 7, further comprising a step of thermally decomposing the raw material before the step of catalytically cracking.

9. The olefin production method according to any one of claims 1 to 8, further comprising a step of vaporizing the raw material before the step of catalytically cracking, wherein the step of catalytically cracking is a step of catalytically cracking the raw material in a gaseous state.

10. The olefin production method according to any one of claims 1 to 9, wherein the step of catalytically cracking is performed at 450°C or more and 600°C or less.

11. The olefin production method according to any one of claims 1 to 10, wherein the zeolite catalyst is a

regenerated catalyst.

12. A method for regenerating a catalyst, comprising a step of calcining the spent zeolite catalyst used in the olefin production method according to any one of claims 1 to 11 in an atmosphere containing 1% by volume to 50% by volume of oxygen to obtain a regenerated catalyst.

13. An olefin production method, comprising a step of catalytically cracking a raw material containing a polyolefin in the presence of a regenerated catalyst regenerated by the regeneration method according to claim 12.