CLAIMS

[Claim 1]

A volatile organic compound adsorbent including an MFI type zeolite
wherein the zeolite having:
an SiO_2/Al_2O_3 (mole ratio) of not less than 50;
a spacing (d-value) on a plane (053) of not more than 2.99 Å in an X-ray diffraction spectrum;
a BET specific surface area of not less than 430 m^3/g; a nitrogen-adsorbing capability of not less than 100 (cm^3/g) under a nitrogen partial pressure P_{N2} (P/P_O) of 0.005; and a toluene-adsorbing capability of not less than 8.2 mass% under a toluene partial pressure $P_T(P/P_0)$ OF 0.01.

[Claim 2]

The adsorbent according to claim 1, wherein the SiO_2/Al_2O_3 (mole ratio) is not less than 90.

[Claim 3]

The adsorbent according to claim 1 or 2, wherein the toluene-adsorbing capability is not less than 8.2% by mass under a toluene partial pressure P_T (P/P_O) of 0.01.

[Claim 4]

The adsorbent according to any one of claims 1 to 3, wherein the content of an alkali metal calculated as an oxide thereof is suppressed to be not more than 0.1% by mass.

[Claim 5]

A resin composition obtained by blending a resin with the adsorbent of any one of claims 1 to 4.

[Claim 6]

The resin composition according to claim 5, wherein said adsorbent is contained in an amount of 0.005 to 100 parts by mass per 100 parts by mass of said resin.

[Claim 7]

The resin composition according to claim 5, wherein said resin is a thermoplastic resin.

[Claim 8]

A method for producing MFI type zeolite from a mixed gel containing a silica source and an alumina source, the method further including:

adding a template, seed crystals and an alkali metal hydroxide, and

carrying out a reaction at a temperature in the range of 80 to 130°C.