

ABSTRACT

MWW TYPE ZEOLITE SUBSTANCE, PRECURSOR SUBSTANCE THEREFOR,
AND PROCESS FOR PRODUCING THESE SUBSTANCES

A process for easily synthesizing a zeolite substance containing an element having a large ionic radius in the framework at a high ratio. This process comprises the following first to fourth steps:

First Step:

a step of heating a mixture containing a template compound, a compound containing a Group 13 element of the periodic table, a silicon-containing compound and water to obtain a precursor (A);

Second Step:

a step of acid-treating the precursor (A) obtained in the first step;

Third Step:

a step of heating the acid-treated precursor (A) obtained in the second step together with a mixture containing a template compound and water to obtain a precursor (B); and

Fourth Step:

a step of calcining the precursor (B) obtained in the third step to obtain a zeolite substance.

Figure 1