CLAIMS

[Claim 1]

An ink jet recording water-based ink comprising: a pigment; an anionic group-containing resin; and a basic compound, wherein the total content of polyvalent metals as impurities in the water-based ink is not more than 1.2 ppm in terms of 1 mass% of a pigment concentration.

[Claim 2]

The ink jet recording water-based ink according to Claim 1, wherein the ink jet recording water-based ink is produced through a contact treatment with a chelating resin containing an alkali metal-bonded chelating group.

[Claim 3]

The ink jet recording water-based ink according to Claim 2, wherein the chelating resin is in the form of particles or fibers, each particle or fiber of the chelating resin contains both an alkali metal-bonded chelating group and a hydrogen-bonded chelating group, and the proportion of the alkali metal-bonded chelating group in all of the chelating groups is in the range of 30 mol% to 90 mol%.

[Claim 4]

The ink jet recording water-based ink according to any one of Claims 1 to 3, wherein the basic compound is an alkali metal hydroxide.

[Claim 5]

A method for producing an ink jet recording water-based ink, the method comprising a contact treatment of a water-based pigment dispersion liquid with a chelating resin that is in the form of particles or fibers, the water-based pigment dispersion liquid containing a pigment, an anionic group-containing resin, and a basic compound, wherein each particle or fiber of the chelating resin contains both an alkali metal-bonded chelating group and a hydrogen-bonded chelating group, and the proportion of the alkali metal-bonded chelating group in all of the chelating groups is in the range of 30 mol% to 90 mol%.

[Claim 6]

The method for producing an ink jet recording water-based ink according to Claim 5, wherein the basic compound is an alkali metal hydroxide, and the alkali metal of the alkali metal hydroxide is the same as the alkali metal of the alkali metal-bonded chelating group.

[Claim 7]

The method for producing an ink jet recording water-based ink according to any one of Claims 5 and 6, wherein the chelating resin is an iminodiacetic acid-type chelating resin.

[Claim 8]

A polyvalent metal scavenger used for an ink jet recording liquid, the polyvalent metal scavenger comprising

a chelating resin which contains chelating groups and which is in the form of particles or fibers, wherein each particle or fiber of the chelating resin contains both an alkali metal-bonded chelating group and a hydrogen-bonded chelating group, and the proportion of the alkali metal-bonded chelating group in all of the chelating groups in the polyvalent metal scavenger is in the range of 30 mol% to 90 mol%.

[Claim 9]

The polyvalent metal scavenger used for an ink jet recording liquid according to Claim 8, wherein the chelating resin is an iminodiacetic acid-type chelating resin.

CLAIMS

[Claim 1]

A method for producing an ink jet recording water-based ink, the method comprising a contact treatment of a water-based pigment dispersion liquid with an iminodiacetic acid-type chelating resin that is in the form of particles or fibers, the water-based pigment dispersion liquid containing a pigment, an anionic group-containing resin, and a basic compound, wherein each particle or fiber of the chelating resin contains a sodium-bonded chelating group and/or a potassium-bonded chelating group, and a hydrogen-bonded chelating group, and the proportion of the sodium-bonded chelating group and/or the potassium-bonded chelating group in all of the chelating groups is in the range of 30 mol% to 90 mol%.

[Claim 2]

A polyvalent metal scavenger used for an ink jet recording liquid, the polyvalent metal scavenger comprising an iminodiacetic acid-type chelating resin which contains a sodium-bonded chelating group and/or a potassium-bonded chelating group and which is in the form of particles or fibers, wherein each particle or fiber of the chelating resin contains a sodium-bonded chelating group and/or a potassium-bonded chelating group, and a hydrogen-bonded chelating group, and the proportion of the sodium-bonded chelating group and/or the potassium-bonded chelating group in all of the chelating groups in the polyvalent metal scavenger is in the range of 30 mol% to 90 mol%.