CLAIMS

1. A dispersant for suspension polymerization, wherein

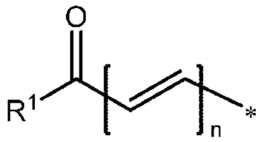
the dispersant is a powder which comprises a vinyl alcohol polymer having a structure represented by formula 1 and has an average particle diameter of ~~100~~ 200 μm or more and ~~2,000~~ 1,000 μm or less,

the dispersant comprises particles A which have a particle diameter of 500 μm or more and particles B which have a particle diameter of 220 μm or less, ~~and~~

a ratio (A/B) of an absorbance A of a 0.1% by mass aqueous solution of the particles A at an optical path length of 10 mm and a wavelength of 320 nm to an absorbance B of a 0.1% by mass aqueous solution of the particles B at the optical path length of 10 mm and the wavelength of 320 nm is 0.7 or more and 1.2 or less,

an average value PA of a roundness P, represented by formula 2, of 50 particles arbitrarily extracted from the particles of the dispersant which have a particle diameter of 100 μm or more and 1,000 μm or less is 0.1 or more and 0.8 or less, and

the vinyl alcohol polymer has a viscosity-average degree of polymerization of 700 or more and 1,500 or less, and a degree of saponification of 68 mol% or more and 85 mol% or less,



· · · 1

$$P = \left(\sum_{i=1}^{N} r_i\right) \Big/ NR \qquad 2$$

wherein, in the formula 1, R^1 represents an alkyl group having 1 to 4 carbon atoms; n is an integer of 1 to 10; and * denotes a site bonding to a part other than the structure represented by the formula 1 in the vinyl alcohol polymer, and

in the formula 2, r_i represents a radius of curvature of each corner of a particle of the 50 particles arbitrarily extracted; R represents a radius of a maximum inscribed circle of the particle; and N represents a number of corners of the particle, wherein in a case in which the number of corners of the particle is 9 or more, the radii of curvature of eight corners, in increasing order from a smallest radius of curvature, are adopted, and N is set to 8.

~~2. The dispersant for suspension polymerization according to claim 1, wherein an average value PA of a roundness P, represented by formula 2, of 50 particles arbitrarily extracted from the particles of the dispersant which have a particle diameter of 100 μm or more and 1,000 μm or less is 0.1 or more and 0.8 or less:~~

~~$$P = \left(\sum_{i=1}^{N} r_i\right) \Big/ NR \qquad 2$$~~

~~wherein, in the formula 2, r_i represents a radius of curvature of each corner of a particle of the 50 particles arbitrarily extracted; R represents a radius of a maximum inscribed circle of the particle; and N represents a number of corners of the particle, wherein in a case in which the number of corners of the particle is 9 or more, the radii of curvature of eight corners, in increasing order from a smallest radius of curvature, are adopted, and N is set to 8.~~

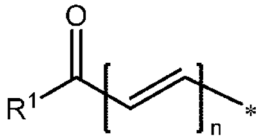
2. A dispersant for suspension polymerization, wherein

the dispersant is a powder which comprises a vinyl alcohol polymer having a structure represented by formula 1 and has an average particle diameter of 150 μm or more and 2,000 μm or less,

the dispersant comprises particles A which have a particle diameter of 500 μm or more and particles B which have a particle diameter of 220 μm or less,

a ratio (A/B) of an absorbance A of a 0.1% by mass aqueous solution of the particles A at an optical path length of 10 mm and a wavelength of 320 nm to an absorbance B of a 0.1% by mass aqueous solution of the particles B at the optical path length of 10 mm and the wavelength of 320 nm is 0.7 or more and 1.2 or less, and

an average value PA of a roundness P, represented by formula 2, of 50 particles arbitrarily extracted from the particles of the dispersant which have a particle diameter of 100 μm or more and 1,000 μm or less is 0.25 or more and 0.8 or less,



· · · 1

$$P = \left(\sum_{i=1}^{N} r_i\right) \Big/ NR \qquad 2$$

wherein, in the formula 1, R^1 represents an alkyl group having 1 to 4 carbon atoms; n is an integer of 1 to 10; and * denotes a site bonding to a part other than the structure represented by the formula 1 in the vinyl alcohol polymer, and

in the formula 2, r_i represents a radius of curvature of each corner of a particle of the 50 particles arbitrarily extracted; R represents a radius of a maximum inscribed circle of the particle; and N represents a number of corners of the particle, wherein in a case in which the number of corners of the particle is 9 or more, the radii of curvature of eight corners, in increasing order from a smallest radius of curvature, are adopted, and N is set to 8.

3. The dispersant for suspension polymerization according to claim ~~1 or~~ 2, wherein the vinyl alcohol polymer has a viscosity-average degree of polymerization of 500 or more and 1,500 or less, and a degree of saponification of 60 mol% or more and 90 mol% or less.

4. The dispersant for suspension polymerization according to any one of claims 1 to 3, wherein a 0.1% by mass aqueous solution of the vinyl alcohol polymer has an absorbance at the optical path length of 10 mm and a wavelength of 280 nm of 0.05 or more, and an absorbance at the optical path length of 10 mm and the wavelength of 320 nm of 0.05 or more.

5. The dispersant for suspension polymerization according to any one of claims 1 to 4, wherein a percentage content of particles which have a particle diameter of 100 μm or more and 1,000 μm or less is 50% by mass or more.

6. A method for producing the dispersant for suspension polymerization according to any one of claims 1 to 5, the method comprising:

grinding a resin solid comprising the vinyl alcohol polymer to obtain a coarse powder; and

processing surfaces of the coarse powder while heating.

7. A method for producing vinyl polymer particles, the method comprising subjecting a vinyl compound to suspension polymerization using the dispersant for suspension polymerization according to any one of claims 1 to 5.