Claims

1. A fluorine-containing ethylene-vinyl alcohol copolymer resin composition, comprising:

   an ethylene-vinyl alcohol copolymer, and

   at least one fluorine-containing particle,

   wherein the fluorine-containing ethylene-vinyl alcohol copolymer resin composition has a total fluoride ion content ranging from 45 to 41000 ppm, wherein the fluorine-containing particle includes a fluorinated polymer.

2. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of claim 1, wherein the fluorine-containing ethylene-vinyl alcohol copolymer resin composition has a surface fluoride ion content ranging from 1 to 126 ppm.

3. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of claim 1 or 2, further including at least two melting point temperatures:

   a first melting point temperature of 100°C to about 140°C and a second melting point temperature of 150°C to about 195°C.

4. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 3, wherein a ratio of the surface fluoride ion content to the total fluoride ion content of the fluorine-containing ethylene-vinyl alcohol copolymer resin composition ranges from 0.0015 to 0.03.

5. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 4, wherein an ethylene content of the ethylene-vinyl alcohol copolymer is 24-48 mole%.

6. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 5, wherein the ethylene-vinyl alcohol copolymer has a degree of saponification greater than 99.5 mole%.

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7. The fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 6, wherein the fluorine-containing ethylene-vinyl alcohol copolymer resin composition further contains a boron content of 50-250 ppm.
8. A fluorine-containing ethylene-vinyl alcohol copolymer resin composition, comprising: an ethylene-vinyl alcohol copolymer and at least one fluorine-containing particle, wherein the fluorine-containing ethylene-vinyl alcohol copolymer resin composition has a ratio of a surface fluoride ion content to a total fluoride ion content ranges from 0.0015 to 0.03, wherein the fluorine-containing particle includes a fluorinated polymer.
9. A mixture containing fluorine-containing ethylene-vinyl alcohol copolymer resin composition, comprising:

   the fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 8, and

   a first ethylene-vinyl alcohol copolymer;

   wherein per 20 g of the mixture has a total fluoride ion content ranging from 100 to 11000 ppm.
10. The mixture of claim 9, wherein the mixture has a surface fluoride ion content ranging from 2 to 55 ppm.
11. The mixture of claim 10, wherein a ratio of the surface fluoride ion content to the total fluoride ion content of the mixture ranges from 0.0019 to 0.04.
12. The mixture of any one of claims 9 to 11, wherein the fluorine-containing ethylene-vinyl alcohol copolymer resin composition has an ethylene content that is the same as or different from an ethylene content of the first ethylene-vinyl alcohol copolymer.
13. A blend containing fluorine-containing ethylene-vinyl alcohol copolymer resin

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composition, comprising:

the fluorine-containing ethylene-vinyl alcohol copolymer resin composition of any one of claims 1 to 8,

a first ethylene-vinyl alcohol copolymer, and

a second ethylene-vinyl alcohol copolymer;

wherein the first ethylene-vinyl alcohol copolymer has an ethylene content that is different from an ethylene content of the second ethylene-vinyl alcohol copolymer, and per 20 g of the blend has a total fluoride ion content ranges from 200 to 2000 ppm.

14. The blend of claim 13, wherein a ratio of a surface fluoride ion content to the total fluoride ion content of the blend ranges from 0.0013 to 0.045.

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