CLAIMS

1. An ink composition comprising:

a pigment present in an amount from 0.5 to 5 wt.% of the ink composition;

a binder system present in an amount from 0.2 to 15 wt.% of the ink composition;

a solvent system present in an amount from 1 to 99 wt.% of the ink composition; and

an acid scavenger present in an amount from 0.05 to 1 wt.% of the ink composition, wherein the acid scavenger is an epoxy resin.

2. The ink composition of claim 1, wherein the epoxy resin comprises at least one of:

3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate; and

a cycloaliphatic epoxide, other than 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate, having solubility in a mixture of glymes and glycol ethers.

3. The ink composition of claim 1, wherein the ink composition is a yellow ink composition, a magenta ink composition, a cyan ink composition, a black ink composition, a light magenta ink composition, a white ink composition, or a light cyan ink composition.

4. The ink composition of claim 1, wherein the pigment is at least one of Pigment Blue 1, Pigment Blue 15, Pigment Blue 15:1, Pigment Blue 15:3, Pigment Blue 15:4, Pigment Blue 15:6, Pigment Blue 16, Pigment Blue 17-1, Pigment Blue 22, Pigment Blue 22, Pigment Blue 27, Pigment Blue 28, Pigment Blue 29, Pigment Blue 36, and Pigment Blue 60.

5. The ink composition of claim 1, wherein the pigment is at least one of Pigment Red 3, Pigment Red 5, Pigment Red 8, Pigment Red 9, Pigment Red 9:8, Pigment Red 19, Pigment Red 22, Pigment Red 31, Pigment Red 38, Pigment Red 43, Pigment Red 48:1, Pigment Red 48:2, Pigment Red 48:3, Pigment Red 48:4, Pigment Red 48:5, Pigment Red 49:1, Pigment Red 53:1, Pigment Red 57:1, Pigment Red 57:2, Pigment Red 58:4, Pigment Red 63:1, Pigment Red 81, Pigment Red 81:1, Pigment Red 81:2, Pigment Red 81:3, Pigment Red 81:4, Pigment Red 88, Pigment Red 104, Pigment Red 108, Pigment Red 112, Pigment Red 122, Pigment Red 123, Pigment Red 144, Pigment Red 146, Pigment Red 149, Pigment Red 166, Pigment Red 168, Pigment Red 169, Pigment Red 170, Pigment Red 177, Pigment Red 178, Pigment Red 179, Pigment Red 184, Pigment Red 185, Pigment Red 207, Pigment Red 208, Pigment Red 216, Pigment Red 224, Pigment Red 226, Pigment Red 257, Pigment Violet 3, Pigment Violet 19, Pigment Violet 23, Pigment Violet 29, Pigment Violet 30, Pigment Violet 37, Pigment Violet 50, Pigment Violet 88, Pigment Orange 13, Pigment Orange 16, Pigment Orange 20, or Pigment Orange 36.

6. The ink composition of claim 1, wherein the pigment is at least one of Pigment Yellow 55, Pigment Yellow 74, Pigment Yellow 79, Pigment Yellow 93, Pigment Yellow 110, Pigment Yellow 120, Pigment Yellow 128, Pigment Yellow 138C, Pigment Yellow 139, Pigment Yellow 150, Pigment Yellow 151, Pigment Yellow 155, Pigment Yellow 156, Pigment Yellow 175, Pigment Yellow 180, Pigment Yellow 185 and Pigment Yellow 213.

7. The ink composition of claim 1, wherein the pigment is at least one of Pigment Black 6, Pigment Black 7, Pigment Black 9, lamp or vegetable black, bone or ivory black, and furnace or channel black.

8. The ink composition of any of claims 1-7, wherein the binder system comprises at least two binders.

9. The ink composition of any of claims 1-8, wherein the binder system comprises at least one copolymer.

10. The ink composition of any of claims 1-9, wherein the binder system comprises at least one polymer selected from the group consisting of a vinyl acetate copolymer, a methacrylate copolymer, and combinations thereof.

11. The ink composition of any of claims 1-10, wherein the solvent system comprises at least two solvents.

12. The ink composition of any of claims 1-11, wherein the solvent system comprises at least three solvents.

13. The ink composition of any of claims 1-12, wherein the solvent system comprises at least four solvents.

14. The ink composition of any of claims 1-13, wherein the solvent system comprises a diethylene glycol.

15. The ink composition of any of claims 1-14, wherein the epoxy resin comprises 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate.

16. An ink set comprising at least a yellow ink composition, a magenta ink composition, a cyan ink composition, and a black ink composition, wherein at least one of the ink compositions comprises the ink composition of any of claims 1-15.

17. The ink set of claim 1, wherein at least two of the ink compositions comprises the ink composition of any of claims 1-15.

18. The ink set of claim 16, wherein at least three of the ink compositions comprises the ink composition of any of claims 1-15.

19. The ink set of claim 16, wherein each of the yellow ink composition, the magenta ink composition, the cyan ink composition, and the black ink composition comprise the ink composition of any of claims 1-15.

20. A method of preparing the ink composition of any of claims 1-15, comprising:

grinding pigments to form ground pigments having submicron particle size;

combining the ground pigments with at least one dispersing resin to form a dispersed composition;

reducing the size of the dispersed composition to be submicron; and

combining the dispersed composition with a solvent system and a binder system.

21. A method of printing inkjet ink composition from an inkjet printer, comprising:

providing at least one inkjet ink composition of any of claims 1-15 to an inkjet printer; and

printing the ink composition onto a substrate;

wherein the ink composition dries on the printed substrate within less than 8 hours.