~~WHAT IS CLAIMED IS:~~

Claims

1. A matting formulation for aqueous coating composition comprising high pore volume silica particles blended with an amount of low pore volume silica particles that is sufficient to provide, when the matting formulation is incorporated into an aqueous coating composition and dried onto a substrate to form a film, a film having increased chemical resistance at a 60° gloss value target, wherein the high pore volume silica particles have a median pore volume of greater than 0.80 cc/g as determined by Barrett-Joyner-Halenda (BJH) method and the low pore volume silica particles have a median pore volume equal to or less than 0.80 cc/g or less as determined by the BJH method.

2. The matting formulation of claim 1, wherein the 60° gloss value target is between about 3.0 and about 30.0 as measured using a portable Micro-TRI-Gloss meter~~.~~, preferably between about 5.0 and about 20.0, more preferred between about 10.0 to about 15.0.

3. ~~The matting formulation of claim 1 or 2, wherein the 60° gloss value target is between about 5.0 and about 20.0 as measured using a portable Micro-TRI-Gloss meter.~~

~~4.~~ The matting formulation of any one of claims 1 ~~to 3, wherein the 60° gloss value target is between about 10.0 to about 15.0 as measured using a portable Micro-TRI-Gloss meter.~~

~~5. The matting formulation of any one of claims 1 to 4~~and 2, wherein, when incorporated into the aqueous coating composition and applied onto a substrate, enables the coating composition to form a film having a chemical resistance rating of from 3 to 5 within a scale of 1 to 5 using test method EN 12720 or DIN68861-1.

~~6.~~4. The matting formulation of any one of claims 1 to ~~5~~3, wherein the film is a clear coat film.

~~7.~~5. The matting formulation of any one of claims 1 to ~~6~~4, wherein the substate is wood, plastics, or black chart paper.

~~8.~~6. The matting formulation of any one of claims 1 to ~~7~~5, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper

and dried, forms a film having a 50/50 water/ethanol damage 1 hr ~~ΔL~~AL* value equal to or less than 10.0 units as measured using a portable Spectro-Guide 45/0 colorimeter~~.~~, preferably equal to or less than 7.0 units, more preferred equal to or less than 5.0 units, still more preferred equal to or less than 3.0 units.

~~9.~~7. The matting formulation of any one of claims 1 to ~~8, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 7.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~10. The matting formulation of any one of claims 1 to 9, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 5.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~11. The matting formulation of any one of claims 1 to 10, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 3.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~12. The matting formulation of any one of claims 1 to 11~~6, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ~~ΔL~~AL* equal to or less than 7.0 units as measured using a portable Spectro-Guide 45/0 colorimeter~~.~~, preferably equal to or less than 6.0 units, more preferred equal to or less than 5.0 units, still more preferred equal to or less than 4.5 units.

~~13.~~8. The matting formulation of any one of claims 1 to ~~12, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal to or less than 6.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~14. The matting formulation of any one of claims 1 to 13, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried,~~

~~forms a film having a film clarity ΔL* equal to or less than 5.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~15. The matting formulation of any one of claims 1 to 14, wherein the aqueous coating composition, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal to or less than 4.5 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

~~16. The matting formulation of any one of claims 1 to 15~~7, wherein said low pore volume silica particles are present in an amount of from about 1.0 weight percent (wt%) to about 99.0 wt%, and said high pore volume silica particles are present in an amount of from about 99.0 wt% to about 1.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles~~.~~

~~17. The matting formulation of any one of claims 1 to 16~~, wherein preferably said low pore volume silica particles are present in an amount of from about 50.0 wt% to about 98.0 wt%, and said high pore volume silica particles are present in an amount of from about 50.0 wt% to about 2.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles~~.~~

~~18. The matting formulation of any one of claims 1 to 17~~, wherein more preferred said low pore volume silica particles are present in an amount of from about 60.0 wt% to about 95.0 wt%, and said high pore volume silica particles are present in an amount of from about 40.0 wt% to about 5.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles.

~~19.~~9. The matting formulation of any one of claims 1 to ~~18~~8, wherein the pore volume of the low pore volume silica particles differs from the pore volume of the high pore volume silica particles by at least 0.1 cc/g~~.~~, wherein the pore volume of said low pore volume silica particles preferably is at least 0.2 cc/g less than the median pore volume of said high pore volume silica particles, wherein the pore volume of said low pore volume silica particles more preferred is at least 0.50 cc/g less than the pore volume of said high pore

volume silica particles, still more preferred at least 0.80 cc/g less than the pore volume of said high pore volume silica particles.

~~20.~~10. The matting formulation of any one of claims 1 to ~~19, wherein the pore volume of said low pore volume silica particles is at least 0.2 cc/g less than the median pore volume of said high pore volume silica particles.~~

~~21. The matting formulation of any one of claims 1 to 20, wherein the pore volume of said low pore volume silica particles is at least 0.50 cc/g less than the pore volume of said high pore volume silica particles.~~

~~22. The matting formulation of any one of claims 1 to 21, wherein the pore volume of said low pore volume silica particles is at least 0.80 cc/g less than the pore volume of said high pore volume silica particles.~~

~~23. The matting formulation of any one of claims 1 to 22~~9, wherein said low pore volume silica particles have a pore volume of from about 0.01 cc/g to about 0.79 cc/g as determined by the BJH method~~.~~, preferably about 0.01 cc/g to about 0.60 cc/g.

~~24.~~11. The matting formulation of any one of claims 1 to ~~23, wherein said low pore volume silica particles have a pore volume of from about 0.01 cc/g to about 0.60 cc/g as determined by the BJH method.~~

~~25. The matting formulation of any one of claims 1 to 24~~10, wherein said high pore volume silica particles have a pore volume of from about 0.80 cc/g to about 2.40 cc/g as determined by the BJH method~~.~~, preferably about 0.90 cc/g to about 2.00 cc/g.

~~26.~~12. The matting formulation of any one of claims 1 to ~~25, wherein said high pore volume silica particles have a pore volume of from about 0.90 cc/g to about 2.00 cc/g as determined by BarrettJoyner-Halenda (BJH) method.~~

~~27. The matting formulation of any one of claims 1 to 26~~11, wherein said high pore volume silica particles and said low pore volume silica particles consist essentially of silica.

~~28.~~13. The matting formulation of any one of claims 1 to ~~26~~11, wherein said low pore volume silica particles further comprise one or more first waxes in an amount sufficient to at least partially fill pores of said low pore volume silica particles~~.~~

~~29. The matting formulation of claim 28~~, wherein said low pore volume silica particles preferably comprise from about 5.0 wt% to less than about 65.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles~~.~~

~~30. The matting formulation of claim 28 or 29, wherein said low pore volume silica particles comprise from~~more preferred about 10.0 wt% to less than about 60.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles~~.~~

~~31. The matting formulation of any one of claims 28 to 30, wherein said low pore volume silica particles comprise from~~, still more preferred about 15.0 wt% to less than about 55.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles.

~~32.~~14. The matting formulation of any one of claims 1 to ~~26~~11 and ~~28 to 31~~13, wherein said high pore volume silica particles further comprise one or more second waxes in an amount sufficient to at least partially fill pores of the high pore volume silica particles~~.~~

~~33. The matting formulation of claim 32~~, wherein said high pore volume silica particles preferably comprise from about 5.0 wt% to less than about 65.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles~~.~~

~~34. The matting formulation of claim 32 or 33, wherein said high pore volume silica particles comprise from~~, more preferred about 10.0 wt% to less than about 60.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles~~.~~

~~35. The matting formulation of any one of claims 32 to 34, wherein said high pore volume silica particles comprise from~~, still more preferred about 15.0 wt% to less than about 55.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles.

~~36.~~15. The matting formulation of any one of claims ~~28 to 35~~13 and 14, wherein each of said one or more first waxes and said one or more second waxes independently comprises a hydrocarbon wax, a paraffin wax, a polyethylene wax, a polypropylene wax, a plant wax, an animal wax, or any combination thereof~~.~~, preferably independently comprises a polyethylene wax, a polypropylene wax, or a combination thereof, more preferred independently comprises a polyethylene wax having an average molecular weight of at least 2000, still more preferred comprises the same one or more waxes.

~~37. The matting formulation of any one of claims 28 to 36, wherein each of said one or more first waxes and said one or more second waxes independently comprises a polyethylene wax, a polypropylene wax, or a combination thereof.~~

~~38. The matting formulation of any one of claims 28 to 37, wherein each of said one or more first waxes and said one or more second waxes independently comprises a polyethylene wax having an average molecular weight of at least 2000.~~

~~39. The matting formulation of any one of claims 28 to 38, wherein each of said one or more first waxes and said one or more second waxes comprises the same one or more waxes.~~

~~40.~~16. The matting formulation of any one of claims 1 to ~~39~~15, wherein each of said low pore volume silica particles and said high pore volume silica particles independently comprises silica gel, precipitated silica, fumed silica particles, or any combination thereof~~.~~, preferably independently comprises silica gel particles, more preferred independently have a median particle size of from about 1.0 micron (pm) to about 50.0 pm, still more preferred independently have a median particle size of from about 3.0 pm to about 15.0 pm.

~~41.~~17. The matting formulation of any one of claims 1 to ~~40, wherein each of said low pore volume silica particles and said high pore volume silica particles independently comprises silica gel particles. 35 WO 2021/041101 PCT/US2020/046935~~

~~42. The matting formulation of any one of claims 1 to 41, wherein said low pore volume silica particles and said high pore volume silica particles independently have a median particle size of from about 1.0 micron (µm) to about 50.0 µm.~~

~~43. The matting formulation of any one of claims 1 to 42, wherein said low pore volume particles and said high pore volume particles independently have a median particle size of from about 3.0 µm to about 15.0 µm.~~

~~44. The matting formulation of any one of claims 1 to 43~~16, wherein said low pore volume silica particles and said high pore volume silica particles are free-flowing particles.

~~45.~~18. A method of preparing the matting formulation of any one of claims 1 to ~~44~~17, said method comprising:

combining the low pore volume silica particles and the high pore volume silica particles to form a blend of the low pore volume silica particles and the high pore volume silica particles.

~~46.~~19. The method of claim ~~45~~18, further comprising: contacting the low pore volume silica particles with the one or more first waxes~~.~~, and/or

~~47. The method of claim 45 or 46,~~ further comprising: contacting the high pore volume silica particles with the one or more second waxes~~.~~,

~~48. The method of claim 46 or 47,~~ wherein said contacting step preferably a) comprises:

dissolving or dispersing the one or more first or second waxes in one or more solvents to form one or more suspensions or dispersions;

incorporating the low pore volume silica particles or the high pore volume silica particles into the one or more suspensions or dispersions; and ~~removing the solvent from the one or more suspensions or dispersions.~~

~~49. The method of claim 46 or 47,~~ removing the solvent from the one or more suspensions or dispersions, or

wherein said contacting step preferably b) comprises:

melting the one or more first or second waxes to form one or more molten liquids; and

incorporating the low pore volume silica particles or the high pore volume silica particles into the one or more molten liquids~~.~~, or

~~50. The method of claim 46 or 47,~~ wherein said contacting step preferably c) comprises:

simultaneously mixing and/or milling (a) the one or more first or second waxes, and (b) the low pore volume silica particles or the high pore volume silica particles with heat.

~~51.~~20. The method of any one of claims ~~45 to 50,~~18 or 19,

a) further comprising:

reducing the particle size of the low pore volume silica particles or the high pore volume silica particles to obtain silica particles having a final particle size of less than 100 microns (~~µm).~~pm), or

~~52. The method of any one of claims 45 to 50,~~ b) further comprising:

forming the low pore volume silica particles or the high pore volume silica particles having a first particle size of less than about 500 microns (~~µm);~~ pm);

heat treating the low pore volume silica particles or the high pore volume silica particles at an elevated temperature for a heat treatment period of time;

allowing the heat-treated low pore volume silica particles or the heat-treated high pore volume silica particles to cool; and

milling the heat-treated low pore volume silica particles or the heat-treated high pore volume silica particles so as to result in a final particle size of less than about 100 ~~µm.~~ pm,

~~53. The method of claim 52,~~ wherein in b) the low pore volume silica particles or the high pore volume silica particles are heat treated at an elevated temperature ranging from about 90°C to about 140°C, and the heat treatment period of time ranges from about 1.0 hour (hr) to about 4.0 hr~~.~~,

~~54. The method of claim 53,~~ wherein the elevated temperature preferably ranges from about 100°C to about 130°C, and the heat treatment period of time ranges from about 1.0 hr to about 1.5 hr.

~~55.~~21. The method of claim ~~51,~~20a), wherein said reducing step results in low pore volume silica particles or high pore volume silica particles having a final particle size of less than about 45.0 ~~p.m.~~ pm.

~~56.~~22. A coating composition comprising the matting formulation of any one of claims 1 to ~~44.~~

~~57. The coating composition of claim 56,~~17, wherein said coating composition comprises an aqueous composition.

~~58. The coating composition of claim 56 or 57, wherein when the coating composition is dried onto a substrate to form a film, the film has a 60° gloss value between about 5.0 and about 20.0 as measured using a portable Micro-TRI-Gloss meter.~~

~~59. The coating composition of any one of claims 56 to 58, wherein when the coating composition is dried onto a substrate to form a film, the film has a 60° gloss value between about 10.0 to about 15 as measured using a portable Micro-TRI-Gloss meter.~~

~~60. The coating composition of any one of claims 56 to 59, wherein when the coating composition is dried onto a substrate to form a film, the film has a chemical resistance rating of from 3 to 5 within a scale of 1 to 5 using test method EN 12720 or DIN68861-1.~~

~~61. The coating composition of any one of claims 56 to 60, wherein the film is a clear coat film.~~

~~62. The coating composition of any one of claims 56 to 61, wherein the substate is wood, plastics, or black chart paper.~~

~~63. The coating composition of any one of claims 56 to 62, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL^* value equal to or less than 10.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.~~

64. The coating composition of any one of claims 56 to 63, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 7.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

65. The coating composition of any one of claims 56 to 64, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 5.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

66. The coating composition of any one of claims 56 to 65, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a 50/50 water/ethanol damage 1 hr ΔL* value equal to or less than 3.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

67. The coating composition of any one of claims 56 to 66, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal 5 to or less than 7.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

68. The coating composition of any one of claims 56 to 67, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal to or less than 6.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

69. The coating composition of any one of claims 56 to 68, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal to or less than 5.0 units as measured using a portable Spectro-Guide 45/0 colorimeter.

70. The coating composition of any one of claims 56 to 69, wherein, when applied onto a plain, smooth and non-penetrating black chart paper and dried, forms a film having a film clarity ΔL* equal to or less than 4.5 units as measured using a portable Spectro-Guide 45/0 colorimeter.

71. The coating composition of any one of claims 56 to 70, wherein said low-pore volume silica particles are present in an amount of from about 1.0 weight percent (wt%) to about 99.0 wt%, and said high pore volume silica particles are present in an amount of from about 99.0 wt% to

~~about 1.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles.~~

~~72. The coating composition of any one of claims 56 to 71, wherein said low pore volume silica particles are present in an amount of from about 50.0 wt% to about 98.0 wt%, and said high pore volume silica particles are present in an amount of from about 50.0 wt% to about 2.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles.~~

~~73. The coating composition of any one of claims 56 to 72, wherein said low pore volume silica particles are present in an amount of from about 60.0 wt% to about 95.0 wt%, and said high pore volume silica particles are present in an amount of from about 40.0 wt% to about 5.0 wt%, based on a total weight of said low pore volume silica particles and said high pore volume silica particles.~~

~~74. The coating composition of any one of claims 56 to 73, wherein the pore volume of the low pore volume silica particles differs from the pore volume of the high pore volume silica particles by at least 0.1 cc/g.~~

~~75. The coating composition of any one of claims 56 to 74, wherein the pore volume of said low pore volume silica particles is at least 0.2 cc/g less than the median pore volume of said high pore volume silica particles.~~

~~76. The coating composition of any one of claims 56 to 75, wherein the pore volume of said low pore volume silica particles is at least 0.50 cc/g less than the pore volume of said high pore volume silica particles.~~

~~77. The coating composition of any one of claims 56 to 76, wherein the pore volume of said low pore volume silica particles is at least 0.80 cc/g less than the pore volume of said high pore volume silica particles.~~

~~78. The coating composition of any one of claims 56 to 77, wherein said low pore volume silica particles have a pore volume of from about 0.01 cc/g to about 0.79 cc/g as determined by the BJH method.~~

~~79. The coating composition of any one of claims 56 to 78, wherein said low pore volume silica particles have a pore volume of from about 0.01 cc/g to about 0.60 cc/g as determined by the BJH method.~~

~~80. The coating composition of any one of claims 56 to 79, wherein said high pore volume silica particles have a pore volume of from about 0.80 cc/g to about 2.40 cc/g as determined by the BJH method.~~

~~81. The coating composition of any one of claims 56 to 80, wherein said high pore volume silica particles have a pore volume of from about 0.90 cc/g to about 2.00 cc/g as determined by BarrettJoyner-Halenda (BJH) method.~~

~~82. The coating composition of any one of claims 56 to 81, wherein said high pore volume silica particles and said low pore volume silica particles consist essentially of silica.~~

~~83. The coating composition of any one of claims 56 to 81, wherein said low pore volume silica particles further comprise one or more first waxes in an amount sufficient to at least partially fill pores of said low pore volume silica particles.~~

~~84. The coating composition of claim 83, wherein said low pore volume silica particles comprise from about 5.0 wt% to less than about 65.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles.~~

~~85. The coating composition of claim 83 or 84, wherein said low pore volume silica particles comprise from about 10.0 wt% to less than about 60.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles.~~

~~86. The coating composition of any one of claims 83 to 85, wherein said low pore volume silica particles comprise from about 15.0 wt% to less than about 55.0 wt% of said one or more first waxes, based on a total weight of said low pore volume silica particles.~~

~~87. The coating composition of any one of claims 56 to 81 and 83 to 84, wherein said high pore volume silica particles further comprise one or more second waxes in an amount sufficient to at least partially fill pores of the high pore volume silica particles.~~

88. The coating composition of claim 87, wherein said high pore volume silica particles comprise from about 5.0 wt% to less than about 65.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles.

89. The coating composition of claim 87 or 88, wherein said high pore volume silica particles comprise from about 10.0 wt% to less than about 60.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles.

90. The coating composition of any one of claims 87 to 89, wherein said high pore volume silica particles comprise from about 15.0 wt% to less than about 55.0 wt% of said one or more second waxes, based on a total weight of said high pore volume silica particles.

91. The coating composition of any one of claims 83 to 90, wherein each of said one or more first waxes and said one or more second waxes independently comprises a hydrocarbon wax, a paraffin wax, a polyethylene wax, a polypropylene wax, a plant wax, an animal wax, or any combination thereof.

92. The coating composition of any one of claims 83 to 91, wherein each of said one or more first waxes and said one or more second waxes independently comprises a polyethylene wax, a polypropylene wax, or a combination thereof.

93. The coating composition of any one of claims 83 to 92, wherein each of said one or more first waxes and said one or more second waxes independently comprises a polyethylene wax having an average molecular weight of at least 2000.

94. The coating composition of any one of claims 83 to 93, wherein each of said one or more first waxes and said one or more second waxes comprises the same one or more waxes.

95. The coating composition of any one of claims 56 to 94, wherein each of said low pore volume silica particles and said high pore volume silica particles independently comprises silica gel, precipitated silica, fumed silica particles, or any combination thereof.

96. The coating composition of any one of claims 56 to 95, wherein each of said low pore volume silica particles and said high pore volume silica particles independently comprises silica gel particles.

~~97. The coating composition of any one of claims 56 to 96, wherein said low pore volume silica particles and said high pore volume silica particles independently have a median particle size of from about 1.0 micron (µm) to about 50.0 µm.~~

~~98. The coating composition of any one of claims 56 to 97, wherein said low pore volume particles and said high pore volume particles independently have a median particle size of from about 3.0 µm to about 15.0 µm.~~

~~99. The coating composition of any one of claims 56 to 98, wherein said low pore volume silica particles and said high pore volume silica particles are free-flowing particles.~~

~~100. The coating composition of any one of claims 56 to 99~~23. The coating composition of claim 22, wherein said coating composition comprises up to about 16.0 wt% of said matting formulation based on a total weight of said coating composition~~.~~, preferably about 5.0 wt% to about 15.0 wt% of said matting formulation based on a total weight of said coating composition, more preferred about 7.5 wt% to about 12.5 wt% of said matting formulation based on a total weight of said coating composition.

~~101. The coating composition of any one of claims 56 to 100, wherein said coating composition comprises from about 5.0 wt% to about 15.0 wt% of said matting formulation based on a total weight of said coating composition.~~

~~102. The coating composition of any one of claims 56 to 101, wherein said coating composition comprises from about 7.5 wt% to about 12.5 wt% of said matting formulation based on a total weight of said coating composition.~~

~~103.~~24. A substrate coated with the coating composition of any one of claim claims ~~56 to 102.~~

~~104. The~~ 22 and 23, wherein said substrate ~~of claim 103, wherein said substrate~~preferably comprises wood, plastics, or black chart paper.

~~105.~~25. A method of improving chemical resistance of a waterborne composition applied to a wood or plastic substrate, said method comprising:

incorporating the matting formulation of any one of claims 1 to ~~44~~17 into a coating composition;

applying the coating composition onto at least one surface of a wood or plastic substrate to form a coating; and ~~drying the coating to form a film on at least one surface of the wood or plastic substrate.~~

~~106. The method~~drying the coating to form a film on at least one surface of ~~claim 105,~~ the wood or plastic substrate,

wherein ~~in~~the film preferably is a clear coat film.