WHAT IS CLAIMED IS:

1. An azeotrope or azeotrope-like composition, comprising:

~~i) trans-1,2-dichloroethylene;~~

~~ii) a second component selected from a hydrofluoroolefin, a hydrofluoroether, a hydrochlorofluoroolefin, and an alkyl perfluoroalkene ether;~~

~~iii) a third component which is a hydrofluorocarbon; and~~

~~iv) a fourth component selected from a C_{1-6} alcohol, a C_{3-6} ketone, a C_{5-8} alkane, a C_{3-6} cycloalkane, and a C_{1-6} alkyl acetate.~~

i) 75 to 85 weight percent trans-1,2-dichloroethylene;

ii) 1 to 5 weight percent methyl perfluoroheptene ether;

iii) 10 to 15 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and

iv) 1 to 5 weight percent ethanol or isopropanol.

~~2. The composition of claim 1, wherein the second component is a hydrofluoroolefin.~~

~~3. The composition of claim 2, wherein the hydrofluoroolefin is (Z)-1,1,1,4,4,4-hexafluoro-2-butene.~~

~~4. The composition of claim 1, wherein the second component is a hydrofluoroether.~~

~~5. The composition of claim 4, wherein the hydrofluoroether is selected from HFE-7000, HFE-7100, HFE-7200, HFE-7300, HFE-347pc-f, and 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-(trifluoromethyl)pentane.~~

~~6. The composition of claim 4, wherein the hydrofluoroether is 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-(trifluoromethyl)pentane.~~

~~7. The composition of claim 1, wherein the second component is a hydrochlorofluoroolefin.~~

~~8. The composition of claim 7, wherein the hydrochlorofluoroolefin is selected from HCFO-1233zd(Z), HCFO-1233zd(E), and HCFO-1233yd(Z).~~

~~9. The composition of claim 1, wherein the second component is an alkyl perfluoroalkene ether.~~

~~10. The composition of claim 9, wherein the alkyl perfluoroalkene ether is methyl perfluoroheptene ether.~~

~~11.~~2. The composition of claim ~~10~~1, wherein methyl perfluoroheptene ether comprises a mixture of ~~about~~ 50 weight percent 5-methoxy perfluoro-3-heptene, ~~about~~ 20 weight percent 3-methoxy perfluoro-3-heptene, ~~about~~ 20 weight percent 4-methoxy perfluoro-2-heptene, and ~~about~~ 8 weight percent 4-methoxy perfluoro-3-heptene.

~~12. The composition of claim 11, wherein the composition comprises about 1 to about 5 weight percent methyl perfluoroheptene ether.~~

~~13.~~3. The composition of claims 1 or 2 ~~11~~, wherein the composition comprises about 3 to about 5 weight percent methyl perfluoroheptene ether.

~~14. The composition of claim 1, wherein the third component is selected from 1,1,2,2,3,3,4-heptafluorocyclopentane, 1,1,1,3,3-pentafluorobutane, and 1,1,1,3,3-pentafluoropropane.~~

~~15. The composition of claim 1, wherein the third component is 1,1,2,2,3,3,4-heptafluorocyclopentane.~~

~~16. The composition of claim 15, wherein the composition comprises about 10 to about 15 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane.~~

~~17~~4. The composition of any one of the preceding claims ~~claim 15~~, wherein the composition comprises ~~about~~ 11 to ~~about~~ 13 weight percent 1,1,2,2,3,3,4-

heptafluorocyclopentane.

~~18. The composition of claim 1, wherein the fourth component is a C_{1-6} alcohol.~~

~~19. The composition of claim 18, wherein the C_{1-6} alcohol is selected from methanol, ethanol, and isopropanol.~~

~~20. The composition of claim 18, wherein the C_{1-6} alcohol is ethanol.~~

~~21. The composition of claim 20, wherein the composition comprises about 1 to about 5 weight percent ethanol.~~

~~22~~5. The composition of any one of the preceding claims~~claim 20~~, wherein the composition comprises ~~about~~ 2 to ~~about~~ 4 weight percent ethanol or isopropanol.

~~23. The composition of claim 1, wherein the fourth component is a C_{3-6} ketone.~~

~~24. The composition of claim 23, wherein the C_{3-6} ketone is acetone.~~

~~25. The composition of claim 1, wherein the fourth component is a C_{5-8} alkane.~~

~~26. The composition of claim 25, wherein the C_{5-8} alkane is n-hexane.~~

~~27. The composition of claim 1, wherein the fourth component is a C_{3-6} cycloalkane.~~

~~28. The composition of claim 27, wherein the C_{3-6} cycloalkane is cyclopentane.~~

~~29. The composition of claim 1, wherein the fourth component is a C_{1-6} alkyl acetate.~~

~~30. The composition of claim 29, wherein the C_{1-6} alkyl acetate is ethyl acetate.~~

~~31. The composition of claim 1, wherein the composition comprises about 75 to about 85 weight percent trans-1,2-dichloroethylene.~~

~~32~~6. The composition of any one of the preceding claims~~claim 1~~, wherein the composition comprises ~~about~~ 79 to ~~about~~ 81 weight percent trans-1,2-dichloroethylene.

~~33. The composition of claim 1, wherein the composition comprises:~~

~~i) about 75 to about 85 weight percent trans-1,2-dichloroethylene;~~

~~ii) about 1 to about 5 weight percent methyl perfluoroheptene ether;~~

~~iii) about 10 to about 15 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and~~

~~iv) about 1 to about 5 weight percent ethanol.~~

~~34~~7. The composition of claim 1, wherein the composition comprises:

i) ~~about~~ 79 to ~~about~~ 81 weight percent trans-1,2-dichloroethylene;

ii) ~~about~~ 3 to ~~about~~ 5 weight percent methyl perfluoroheptene ether;

iii) ~~about~~ 11 to ~~about~~ 13 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and

iv) ~~about~~ 2 to ~~about~~ 4 weight percent ethanol or isopropanol, preferably.

~~35. The composition of claim 1,~~ wherein the composition comprises:

i) ~~about~~ 81 weight percent trans-1,2-dichloroethylene;

ii) ~~about~~ 4 weight percent methyl perfluoroheptene ether;

iii) ~~about~~ 12 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and

iv) ~~about~~ 3 weight percent ethanol or isopropanol.

~~36~~8. The composition of any one of the preceding claims,~~claim 35,~~ wherein the fourth component iv) is ethanol and wherein the composition has a boiling point of ~~about~~ 44°C to ~~about~~ 46°C at a pressure of about 101 kPa, or wherein the fourth component iv) is isopropanol and wherein the composition has a boiling point of 45°C to 47°C at a pressure of about 101 kPa.

~~37~~9. The composition of any one of the preceding claims~~claim 1~~, wherein the composition preferably consists ~~essentially~~ of trans-1,2-dichloroethylene, methyl perfluoroheptene ether, 1,1,2,2,3,3,4-heptafluorocyclopentane, and ethanol or isopropanol.

~~38. The composition of claim 1, wherein the composition consists of trans-1,2-dichloroethylene, methyl perfluoroheptene ether, 1,1,2,2,3,3,4-heptafluorocyclopentane, and ethanol.~~

~~39. The composition of claim 1, wherein the composition is an azeotrope composition.~~

~~40. The composition of claim 1, wherein the composition is an azeotrope-like composition.~~

~~41. The composition of claim 1, wherein the composition comprises:~~

~~i) about 75 to about 85 weight percent trans-1,2-dichloroethylene;~~

~~ii) about 1 to about 5 weight percent methyl perfluoroheptene ether;~~

~~iii) about 10 to about 15 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and~~

~~iv) about 1 to about 5 weight percent isopropanol.~~

~~42~~10. ~~The composition of claim 1, wherein the composition comprises:~~An azeotrope or azeotrope-like composition, comprising;

i) ~~about~~ 70 to ~~about~~ 80 weight percent trans-1,2-dichloroethylene;

ii) ~~about~~ 5 to ~~about~~ 15 weight percent 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-(trifluoromethyl)pentane;

iii) ~~about~~ 5 to ~~about~~ 10 weight percent 1,1,2,2,3,3,4-heptafluorocyclopentane; and

iv) ~~about~~ 1 to ~~about~~ 5 weight percent n-hexane.

~~43~~11. A process for dissolving a solute, comprising contacting and mixing said solute with a sufficient quantity of the composition of any one of the preceding claims~~claim 1~~.

~~44~~12. A process of cleaning a surface, comprising contacting the composition of any one of claims 1 to 10 with said surface.

~~45~~13. A process for removing at least a portion of water from the surface of a wetted substrate, comprising contacting the substrate with the composition of any one of claims 1 to 10, and then removing the substrate from contact with the composition.

~~46~~14. The process of claim 13~~45~~, wherein composition further comprises at least one surfactant suitable for dewatering or drying the substrate.

~~47~~15. A process of depositing a fluorolubricant on a surface, comprising:

a) combining a fluorolubricant and a solvent to form a lubricant-solvent combination, wherein the solvent comprises a composition of any one of claims 1 to 10;

b) contacting the lubricant-solvent combination with the surface; and

c) evaporating the solvent from the surface to form a fluorolubricant coating on the surface.