WHAT IS CLAIMED IS:

1. A composition, comprising:

i) neopentane; and

ii) Z-1,1,1,4,4,4-hexafluoro-2-butene,

wherein the Z-1,1,1,4,4,4-hexafluoro-2-butene is present in the composition in an amount effective to form an azeotrope composition or an azeotrope-like composition with the neopentane.

2. The composition of claim 1, wherein the composition comprises from 60 to 93 mol% neopentane and 40 to 7 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene.

3. The composition of claim 2, which has a boiling point of from -40°C to 120°C at a pressure of from 1.5 psi to 310 psi.

4. The composition of claim 3, which is an azeotrope composition.

5. The composition of claim 1, wherein the composition comprises from 56 to 83 mol% neopentane and 44 to 17 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene.

6. The composition of claim 5, which has a boiling point of from 5°C to 145°C at a pressure of from 1 atm to 30 atm.

7. The composition of claim 6, which is an azeotrope composition.

8. The composition of claim 1, wherein the composition comprises from 99.6 to 79.2 mol% neopentane and 0.4 to 20.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene.

9. The composition of claim 8, which has a boiling point of from 7.8°C to 9.4°C at a pressure of 1 atm.

10. The composition of claim 9, which is an azeotrope-like composition.

11. The composition of claim 1, wherein the composition comprises from 3.2 to 1.6 mol% neopentane and 96.8 to 98.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene.

12. The composition of claim 11, which has a boiling point of from 32.6°C to 33.0°C at a pressure of 1 atm.

13. The composition of claim 12, which is an azeotrope-like composition.

14. The composition of claim 1, wherein the composition comprises:

from 99.8 to 85.2 mol% neopentane and 0.2 to 14.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 80.8 mol% neopentane and 0.2 to 19.2 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 76.2 mol% neopentane and 0.2 to 23.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 61.8 mol% neopentane and 0.2 to 38.2 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 0.4 to 0.2 mol% neopentane and 99.6 to 99.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 69.8 mol% neopentane and 0.2 to 30.2 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 67.6 mol% neopentane and 0.2 to 32.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 95.0 mol% neopentane and 0.2 to 5 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 86.4 to 63.6 mol% neopentane and 13.6 to 36.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 0.4 to 0.2 mol% neopentane and 99.6 to 99.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 96.6 mol% neopentane and 0.2 to 3.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 80.6 to 59.6 mol% neopentane and 19.4 to 40.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 97.6 mol% neopentane and 0.2 to 2.4 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 74.2 to 56.0 mol% neopentane and 25.8 to 44.0 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 0.2 to 0.8 mol% neopentane and 99.2 to 99.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 99.8 to 98.2 mol% neopentane and 0.2 to 1.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 76.6 to 50.0 mol% neopentane and 23.4 to 50.0 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene; or

from 1.0 to 0.2 mol% neopentane and 99.0 to 99.8 mol% Z-1,1,1,4,4,4-hexafluoro-2-butene.

15. The composition of claim 14, which has a boiling point of from -20°C to 120°C at a pressure of 1 atm.

16. The composition of claim 15, which is an azeotrope-like composition.