9. A composition of claim 1,

wherein said lignin is in a liquid form.

10. A composition of claim 1, further comprising:

less than about 700 mg of calcium per kg of said lignin.

11. A composition of claim 1, further comprising:

less than about 525 mg of iron per kg of said lignin.

12. A composition of claim 1, further comprising:

less than about 150 mg of sulfur per kg of said lignin.

~~13. A composition of claim 1,~~

~~wherein levels of said elements are measured by inductively coupled plasma emission spectroscopy.~~

~~14~~13. A composition of claim 1, further comprising:

less than about 20 g of ash per kg of said lignin.

~~15~~14. A composition of claim 1, further comprising:

less than about 2000 mg of nitrogen per kg of said lignin.

~~16~~15. A composition of claim 1, further comprising:

a weight ratio of the total mass of hydrogen and nitrogen to carbon of less than about 0.110.

~~17~~16. A composition of claim 1,

wherein said lignin is present at a level of at least 30% by weight, based on the total weight of the composition, as measured by pyrolysis molecular beam mass spectrometry.

~~18~~17. A composition of claim 1,

wherein the weight ratio of syringyl monolignol to guaiacyl monolignol is about 2.0 to about 3.0, as measured by pyrolysis molecular beam mass spectrometry.

~~19~~18. A composition, comprising:

lignin;

less than about 700 mg of calcium per kg of said lignin;

less than about 525 mg of iron per kg of said lignin; and

less than about 150 mg of sulfur per kg of said lignin.

~~20~~19. A composition of claim ~~19~~18, further comprising:

less than about 2000 mg in total per kg of said lignin of elements;

wherein said elements are Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, V, and Zn.

~~21~~20. A composition, comprising:

lignin; and

less than about 525 mg of iron per kg of said lignin.

~~22~~21. A composition of claim ~~21~~20, further comprising:

less than about 700 mg of calcium per kg of said lignin.

~~23~~22. A composition of claim ~~21~~20, further comprising:

less than about 2000 mg in total per kg of said lignin of elements;

wherein said elements are Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, V, and Zn.

~~24~~23. A composition, comprising:

lignin; and

less than about 150 mg of sulfur per kg of said lignin.

~~25~~24. A composition of claim ~~24~~23, further comprising:

less than about 2000 mg in total per kg of said lignin of elements;

wherein said elements are Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, V, and Zn.

~~26~~25. A composition of claim ~~24~~23, further comprising:

less than about 700 mg of calcium per kg of said lignin.

~~27~~26. A composition of claim ~~24~~23, further comprising:

less than about 525 mg of iron per kg of said lignin.