CLAIMS

1. A flux comprising a first component and an effective amount of a second component to provide pliability after deposition.

2. The flux of claim 1, in which the first component is a resin or a rosin.

3. The flux of claim 2, in which the second component is a material capable of being polymerized or is a polymer.

4. The flux of claim 3, in which the material capable of being polymerized is selected from the group consisting of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof.

5. The flux of claim 2, further comprising a third component present in an effective amount to reduce formation of chemical species on the surface.

6. The flux of claim 5, in which the third component is an activator.

7. The flux of claim 5, in which the amount of the third component is selected to control the degree of tackiness of the flux.

8. The flux of claim 5, further comprising a fourth component present in an effective amount to render the flux soft prior to or after deposition on the surface.

9. The flux of claim 8, in which the fourth component is a plasticizer.

10. The flux of claim 8, in which the amount of the fourth component is selected to control the degree of tackiness of the flux.

11. The flux of claim 1, in which the amount of the first component and the amount of the second component are independently selected to provide an adherent flux.

12. The flux of claim 1, further comprising a colorant.

13. The flux of claim 12, in which the colorant is configured as a temperature indicator.

14. The flux of claim 12, in which the colorant provides indicia or is UV-sensitive.

15. The flux of claim 8, further comprising a fifth component selected to render the flux photosensitive.

16. The flux of claim 1, further comprising a binder mixed with the flux.

17. The flux of claim 16, in which the binder is also configured to function as a release agent.

18. A part pre-coated with the flux of claim 1.

19. The pre-coated part of claim 18, in which the part comprises a non-circular cross-section having a portion with the flux pre-coated thereon.

20. A printed circuit board comprising the flux of claim 1.

21. A photovoltaic ribbon comprising the flux of claim 1.

22. An electrical conductor comprising the flux of claim 1.

23. The electrical conductor of claim 22, in which the electrical conductor comprises a non-circular cross-section having a portion with the flux pre-coated thereon.

24. A rosin flux comprising a rosin and an effective amount of a polymeric component to render the rosin flux pliable after deposition.

25. The rosin flux of claim 24, further comprising an activator.

26. The rosin flux of claim 25, further comprising a plasticizer.

27. The rosin flux of claim 26, further comprising a colorant.

28. A method of coating a flux on a substrate, the method comprising disposing a pliable flux on the substrate, the pliable flux comprising a first component and an effective amount of a second component to provide pliability after deposition of the flux on the substrate.

29. A method of controlling the tackiness of a flux comprising a first component and a second component, the method comprising selecting an effective amount of a third component to add to the flux to impart a desired level of tackiness to the flux.

30. The method of claim 29, further comprising selecting a resin or a rosin as the first component, selecting one or more of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof as a second component, and selecting an activator as the third component.

31. The method of claim 29, further comprising selecting an effective amount of a fourth component to add to the flux to impart a desired level of tackiness to the flux.

32. The method of claim 31, further comprising selecting a resin or a rosin as the first component, selecting one or more of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof as the second component, selecting an activator as the third component and selecting a plasticizer as a fourth component.

33. A flux comprising:

a resin;

an effective amount of a polymeric component to provide pliability to the flux after deposition of the flux;

an activator; and

a plasticizer.

34. A flux comprising:

a rosin;

an effective amount of a polymeric component to provide pliability to the flux after deposition of the flux;

an activator; and

a plasticizer.

35. A flux comprising:

a resin;

an effective amount of a polymeric component to provide pliability to the flux after deposition of the flux;

an activator;

a plasticizer; and

a colorant.

36. A flux comprising:

a rosin;

an effective amount of a polymeric component to provide pliability to the flux after deposition of the flux;

an activator;

a plasticizer; and

a colorant.

37. A flux comprising:

a resin;

a polymeric component;

an activator; and

an effective amount of a plasticizer to render the flux soft prior to or after deposition on a surface.

38. A flux comprising:

a rosin;

a polymeric component;

an activator; and

an effective amount of a plasticizer to render the flux soft prior to or after deposition on a surface.

39. A tacky flux comprising:

a resin;

a polymeric component;

an activator; and

an effective amount of a plasticizer to provide tack to the tacky flux.

40. A tacky flux comprising:

a rosin;

a polymeric component;

an activator; and

an effective amount of a plasticizer to provide tack to the tacky flux.

41. A tacky flux comprising:

a resin;

a polymeric component;

an effective amount of an activator to provide tack to the tacky flux; and

a plasticizer.

42. A tacky flux comprising:

a rosin;

a polymeric component;

an effective amount of an activator to provide tack to the tacky flux; and

a plasticizer.

43. A tacky flux comprising:

a resin;

a polymeric component;

an activator; and

a plasticizer, wherein each of the activator and the plasticizer is present in an effective amount to provide tack to the tacky flux.

44. A tacky flux comprising:

a rosin;

a polymeric component;

an activator; and

a plasticizer, wherein each of the activator and the plasticizer is present in an effective amount to provide tack to the tacky flux.

45. An adherent flux comprising:

a resin;

a polymeric component, wherein the resin and the polymeric component are each present in an effective amount to provide an adherent flux;

an activator; and

a plasticizer.

46. An adherent flux comprising:

a rosin;

a polymeric component, wherein the rosin and the polymeric component are each present in an effective amount to provide an adherent flux;

an activator; and

a plasticizer.

CLAIMS

1. A flux that is dried after deposition, comprising: a first component of resin or rosin, and an effective amount of a second component to provide pliability after deposition and subsequent drying.

2. The flux of claim 1, wherein the second component is a polymer or a material capable of being polymerized selected from the group consisting of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof.

3. The flux of claim 1, further comprising a third component present in an effective amount to reduce formation of unwanted chemical species on the surface.

4. The flux of claim 3, further comprising a fourth component present in an effective amount to render the flux soft prior to or after deposition on the surface.

5. The flux of claim 4, wherein the amount of the third component and the amount of the fourth component are respectively selected to control the degree of tackiness of the flux.

6. The flux of claim 1, in which the amount of the first component and the amount of the second component are independently selected to provide an adherent flux.

7. The flux of claim 1, further comprising a colorant configured as a temperature indicator.

8. The flux of claim 4, further comprising a fifth component selected to render the flux photosensitive.

9. A part pre-coated with the flux of claim 1.

10. A printed circuit board, a photovoltaic ribbon or an electrical conductor comprising the flux of claim 1.

11. The part of claim 9 or the electrical conductor of claim 10, comprising a noncircular cross-section having a portion with the flux pre-coated on a surface thereof.

12. A rosin flux that is dried after deposition, comprising:

a rosin, and

an effective amount of a polymeric component to render the rosin flux pliable after deposition and subsequent drying.

13. The rosin flux of claim 12, further comprising at least one of an activator, a plasticizer and a colorant.

14. A method of coating a flux that is dried after being deposited on a substrate, the method comprising:

disposing a pliable flux on the substrate, the pliable flux comprising a first component and an effective amount of a second component to provide pliability after deposition and subsequent drying.

15. A method of controlling tackiness of a flux that is dried after deposition,

the flux comprising a resin or a rosin first component and an effective amount of a second component to provide pliability after the deposition and the subsequent drying,

the method comprising selecting an effective amount of a third component to be added to the flux to impart a desired level of tackiness to the flux.

16. The method of claim 15, further comprising selecting one or more of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof as the second component, and selecting an activator as the third component.

17. The method of claim 15, further comprising selecting an effective amount of a fourth component to be added to the flux to impart a desired level of tackiness to the flux.

18. The method of claim 17, further comprising selecting a resin or a rosin as the first component, selecting one or more of a polyamide, an acrylic, an ethylene acrylic co-polymer and mixtures thereof as the second component, selecting an activator as the third component, and selecting a plasticizer as a fourth component.

19. The flux according to claim 1, wherein the second component comprises an effective amount of a polymeric component to provide pliability to the flux after deposition and subsequent drying of the flux, and further comprising:

an activator; and

an effective amount of a plasticizer to render the flux soft prior to or after deposition on a surface.

20. The flux according to claim 1, wherein the flux is a tacky flux, and

the second component comprises a polymeric component, and further comprising
an effective amount of an activator to provide tackiness to the tacky flux; and
an effective amount of a plasticizer to provide tackiness to the tacky flux.

21. The flux according to claim 1, wherein the flux is an adherent flux,
the second component comprises a polymeric component, and
the resin and the polymeric component are each present in an effective amount to provide an adherent flux;
and further comprising
an activator; and
a plasticizer.