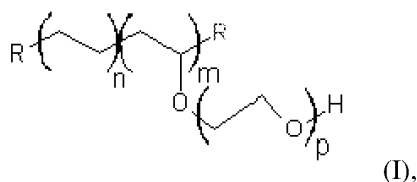


What is claimed is:

1. A tubing for a medical device formed from a blend comprising:
a base polymeric formulation comprising at least a polymer or co-polymer of ethylene or propylene and excluding free poly(ethylene oxide); and
5 an additive comprising a polyethylene-poly(ethylene oxide) amphiphilic graft copolymer (PE-g-PEO);
the PE-g-PEO being present in the blend in an amount in the range of about 0.01 to about 5.0 % by weight of the blend.

2. The tubing of claim 1, wherein the PE-g-PEO is according to Formula (I):



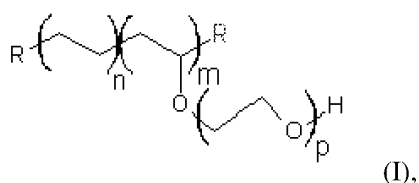
wherein R is hydrogen, alkyl, substituted alkyl, vinylic substituted alkyl, hydrocarbyl, substituted hydrocarbyl, or vinylic substituted hydrocarbyl group; the molar value of m is in the range from 2 to 40 mole percent; the molar value of n is in the range from 60 to 98 mole percent; and p is in the range from 5 to 500 ethylene oxide units.

3. The tubing of claim 1, wherein the base polymeric formulation comprises polyethylene, polypropylene, a polyethylene-polypropylene co-polymer, a polyethylene- and/or polypropylene-containing thermoplastic elastomer (TPE), or combinations thereof.
4. The tubing of claim 3, wherein the base polymeric formulation comprises a co-polymer of polyethylene and polypropylene.
5. The tubing of claim 3, wherein the polyethylene-and/or polypropylene-containing thermoplastic elastomer (TPE) comprises at least 60 mol % total polyethylene and/or polypropylene.
6. The tubing of claim 1, wherein the PE-g-PEO is a product of ethylene oxide ring-opening polymerization of an ethylene vinyl acetate copolymer having from 10 to 40 weight percent of vinyl acetate.

7. The tubing of claim 1, wherein the PE-g-PEO has a dispersity index in the range of 2 to 10.

8. A medical device comprising:

5 a tubing comprising a polymeric blend comprising a base polymeric formulation comprising at least a polymer or co-polymer of ethylene or propylene and excluding free poly(ethylene oxide), and an additive comprising a polyethylene-poly(ethylene oxide) amphiphilic graft copolymer (PE-g-PEO) according to Formula (I):



10 wherein R is hydrogen, alkyl, substituted alkyl, vinylic substituted alkyl, hydrocarbyl, substituted hydrocarbyl, or vinylic substituted hydrocarbyl group; the molar value of m is in the range from 2 to 40 mole percent; the molar value of n is in the range from 60 to 98 mole percent; and p is in the range from 5 to 500 ethylene oxide units;

15 wherein the PE-g-PEO is present in the blend in an amount in the range of about 0.01 to about 5.0 % by weight of the blend; and

a connector bonded to the tubing;

wherein the PE-g-PEO is effective to enhance bonding of the tubing to a connector.

9. The medical device of claim 8, wherein the base polymeric formulation comprises polyethylene, polypropylene, a polyethylene-polypropylene co-polymer, a polyethylene-and/or polypropylene-containing thermoplastic elastomer (TPE), or combinations thereof.

10. The medical device of claim 8, wherein the base polymeric formulation comprises a co-polymer of polyethylene and polypropylene.

11. The medical device of claim 8, wherein the polyethylene-and/or polypropylene-containing thermoplastic elastomer (TPE) comprises at least 60 mol % polyethylene and/or polypropylene.

12. The medical device of claim 8, wherein the PE-g-PEO is a product of ethylene oxide ring-opening polymerization of an ethylene vinyl acetate copolymer having from 10 to 40 weight percent of vinyl acetate.

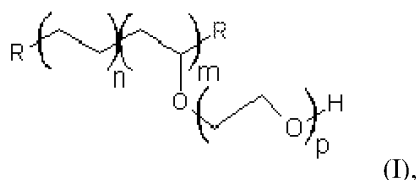
13. The medical device of claim 8, wherein the connector comprises a polar material.

5 14. The medical device of claim 13, wherein the polar material selected from the group consisting of: poly(methyl methacrylate) (PMMA), styrene maleic anhydride (SMA), polycarbonate (PC), and methyl methacrylate-acrylonitrile-butadiene-styrene (MABS).

15. The medical device of claim 8, wherein the connector is solvent-bonded to the tubing.

16. A method of making a medical device comprising:
 10 obtaining a polyethylene-poly(ethylene oxide) amphiphilic graft copolymer (PE-g-PEO);
 combining the PE-g-PEO with a base polymeric formulation comprising at least a polymer or co-polymer of ethylene or propylene and excluding free poly(ethylene oxide) to form a blend, the PE-g-PEO being present in the blend in an amount in the
 15 range of about 0.01 to about 5.0 % by weight of the blend;
 forming a tubing from the blend; and
 bonding the tubing to a connector in the presence of a solvent to form the medical device;
 wherein the PE-g-PEO is effective to enhance bonding of the tubing to a connector.

20 17. The method of claim 16, wherein ethylene oxide ring-opening polymerization of an ethylene vinyl acetate copolymer having from 10 to 40 weight percent of vinyl acetate is used to form the PE-g-PEO, which is according to Formula (I):



wherein R is hydrogen, alkyl, substituted alkyl, vinylic substituted alkyl, hydrocarbyl,
 25 substituted hydrocarbyl, or vinylic substituted hydrocarbyl group; the molar value of

m is in the range from 2 to 40 mole percent; the molar value of n is in the range from 60 to 98 mole percent; and p is in the range from 5 to 500 ethylene oxide units.

18. The method of claim 16, wherein the base polymeric formulation comprises polyethylene, polypropylene, a polyethylene-polypropylene co-polymer, a polyethylene-
5 and/or polypropylene-containing thermoplastic elastomer (TPE), or combinations thereof.
19. The method of claim 16, wherein the base polymeric formulation comprises a co-polymer of polyethylene and polypropylene.
20. The method of claim 16, wherein the polyethylene-and/or polypropylene-containing thermoplastic elastomer (TPE) comprises at least 60 mol % polyethylene and/or
10 polypropylene.