vinylidene group of the formula $CH_2=C(Y^1)–$ and a vinylene group of the formula $Y^1CH=CH–$, and a mixture of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, and a vinylene group of the formula $Y^1CH=CH–$;

Y^1 at each occurrence independently is a C_1 to C_{30} hydrocarbyl group;

L^2 is a C_1 to C_{32} hydrocarbylene group; and

A^2 is a hydrocarbyl group comprising a hindered double bond.

[0004a] In another aspect, the present disclosure relates to a crosslinked foam article made from a curable composition comprising (A) a polyolefin component comprising a telechelic polyolefin of the formula $A^1L^1L^2A^2$ that has a viscosity less than 100,000 cP; wherein the viscosity is a Brookfield viscosity (as measured at 177 °C) in accordance with ASTM-D3236 and (B) a curing component comprising a cross-linking agent, wherein:

L^1 is a polyolefin;

A^1 is selected from the group consisting of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylidene group of the formula $CH_2=C(Y^1)–$, a mixture of a vinylidene group of the formula $CH_2=C(Y^1)–$ and a vinylene group of the formula $Y^1CH=CH–$, and a mixture of a vinyl

group, a vinylidene group of the formula $CH_2=C(Y^1)–$, and a vinylene group of the formula $Y^1CH=CH–$;

Y^1 at each occurrence independently is a C_1 to C_{30} hydrocarbyl group;

L^2 is a C_1 to C_{32} hydrocarbylene group; and

A^2 is a hydrocarbyl group comprising a hindered double bond; and wherein the (A) polyolefin component is present in an amount of from 4 wt% to 15 wt%, based on the total weight of the curable composition.

[0004b] In another aspect, the present disclosure relates to a crosslinked foam article made from a curable composition comprising (A) a polyolefin component comprising an unsaturated polyolefin of the formula A^1L^1 that has a viscosity less than 100,000 cP and a telechelic polyolefin of the formula $A^1L^1L^2A^2$ that has a viscosity less than 100,000 cP; wherein the viscosity is a Brookfield viscosity (as measured at 177 °C) in accordance with ASTM-D3236 and (B) a curing component comprising a cross-linking agent, wherein:

L^1 at each occurrence independently is a polyolefin;

A^1 at each occurrence independently is selected from the group consisting of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylidene group of the formula $CH_2=C(Y^1)–$, a mixture of a vinylidene group of the formula $CH_2=C(Y^1)–$ and a vinylene group of the formula $Y^1CH=CH–$, and a mixture of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, and a vinylene group of the formula $Y^1CH=CH–$;

Y^1 at each occurrence independently is a C_1 to C_{30} hydrocarbyl group;

L^2 is a C_1 to C_{32} hydrocarbylene group; and

A^2 is a hydrocarbyl group comprising a hindered double bond; and wherein the (A) polyolefin component is present in an amount of from 4 wt% to 15 wt%, based on the total weight of the curable composition.

[0005] The curable composition may further comprise (C) an additive component. The (C) additive component may comprise a UV stabilizer. Further, the (C) additive component may comprise a blowing agent. The curable composition may further comprise (D) at least one other polymer.

What is claimed is:

1. A crosslinked foam article made from a curable composition comprising (A) a polyolefin component comprising a telechelic polyolefin of the formula $A^1L^1L^2A^2$ that has a viscosity less than 100,000 cP; wherein the viscosity is a Brookfield viscosity (as measured at 177 °C) in accordance with ASTM-D3236 and (B) a curing component comprising a cross-linking agent, wherein:

L^1 is a polyolefin;

A^1 is selected from the group consisting of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylidene group of the formula $CH_2=C(Y^1)–$, a mixture of a vinylidene group of the formula $CH_2=C(Y^1)–$ and a vinylene group of the formula $Y^1CH=CH–$, and a mixture of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, and a vinylene group of the formula $Y^1CH=CH–$;

Y^1 at each occurrence independently is a C_1 to C_{30} hydrocarbyl group;

L^2 is a C_1 to C_{32} hydrocarbylene group; and

A^2 is a hydrocarbyl group comprising a hindered double bond; and wherein the (A) polyolefin component is present in an amount of from 4 wt% to 15 wt%, based on the total weight of the curable composition.

2. A crosslinked foam article made from a curable composition comprising (A) a polyolefin component comprising an unsaturated polyolefin of the formula A^1L^1 that has a viscosity less than 100,000 cP and a telechelic polyolefin of the formula $A^1L^1L^2A^2$ that has a viscosity less than 100,000 cP; wherein the viscosity is a Brookfield viscosity (as measured at 177 °C) in accordance with ASTM-D3236 and (B) a curing component comprising a cross-linking agent, wherein:

L^1 at each occurrence independently is a polyolefin;

A^1 at each occurrence independently is selected from the group consisting of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylene group of the formula $Y^1CH=CH–$, a mixture of a vinyl group and a vinylidene group of the formula $CH_2=C(Y^1)–$, a mixture of a

vinylidene group of the formula $CH_2=C(Y^1)–$ and a vinylene group of the formula $Y^1CH=CH–$, and a mixture of a vinyl group, a vinylidene group of the formula $CH_2=C(Y^1)–$, and a vinylene group of the formula $Y^1CH=CH–$;

Y^1 at each occurrence independently is a C_1 to C_{30} hydrocarbyl group;

L^2 is a C_1 to C_{32} hydrocarbylene group; and

A^2 is a hydrocarbyl group comprising a hindered double bond; and wherein the (A) polyolefin component is present in an amount of from 4 wt% to 15 wt%, based on the total weight of the curable composition.

3. The curable composition of claim 1 or 2, wherein the telechelic polyolefin has a weight average molecular weight from 1,000 to 40,000 g/mol.

4. The curable composition of claim 2, wherein the unsaturated polyolefin has a weight average molecular weight from 1,000 to 40,000 g/mol.

5. The curable composition of any of the previous claims, wherein the curable composition further comprises (C) an additive component and (D) an ethylene-based polymer.

6. The curable composition of claim 5, wherein the ethylene-based polymer is an ethylene/alpha-olefin copolymer or an olefin block copolymer.

7. The curable composition of claim 5 or 6, wherein the (C) additive component comprises a blowing agent.

8. The curable composition of any of the previous claims, wherein the curable composition has a viscosity (at 100 rad/s and 130 °C) from less than or equal to 2800 Pa-s before curing and an MH-ML of greater than or equal to 3.0 dNm after curing at 180°C for 15 minutes.

9. The curable composition of any of claims 2-8, wherein L^1 of the unsaturated polyolefin of the formula A^1L^1 is covalently bonded to A^1 through a carbon-carbon single bond.

10. The curable composition of any of claims 1-9, wherein L^1 of the telechelic polyolefin of the formula $A^1L^1L^2A^2$ is covalently bonded to each of A^1 and L^2 through carbon-carbon single bonds, and wherein L^2 of the telechelic polyolefin of the formula $A^1L^1L^2A^2$ is covalently bonded to A^2 through a carbon-carbon single bond.