

Preparatory Example 1 – Pressure-sensitive Adhesive A

A pressure-sensitive adhesive syrup was prepared from an initial mixture of 2-ethylhexyl acrylate (90 parts), acrylic acid (10 parts), and 2,2-dimethoxy-2-phenyl acetophenone initiator (0.04 phr). As used herein, the abbreviation “phr” refers to parts
5 per 100 parts resin. This initial mixture was partially polymerized by ultraviolet radiation under nitrogen atmosphere until the Brookfield viscosity was between 1 and 3 Pa·s (1000 and 3000 centipoises). Following partial polymerization, 2,2-dimethoxy-2-phenyl acetophenone initiator (0.2 phr) was added along with 1,6-hexanediol diacrylate crosslinker (0.08 phr). The resulting mixture was mixed thoroughly using a propeller mixer and then was
10 degassed carefully in a desiccator using a vacuum pump. A coating with a wet thickness of 50 micrometers of the syrup was applied to a polyethylene phthalate film treated with silicone release (Teijin DuPont Films Japan Ltd.). The coating was exposed to UVA (ultraviolet radiation) light with a dosage of about 900 mJ per square centimeters for the curing process to take place.

Preparatory Example 2 – Pressure-sensitive Adhesive B

Another pressure-sensitive adhesive layer was prepared as described for Preparatory Example 1 except that fumed silica (10 phr, AEROSIL R972) was mixed with the syrup before coating.

Preparatory Example 3 – Pressure-sensitive Adhesive C

A pressure-sensitive adhesive syrup was prepared from an initial mixture of 2-ethylhexyl acrylate (75 parts), isobornyl acrylate (15 parts), 2-HEA (10 parts), and 2,2-dimethoxy-2-phenyl acetophenone initiator (0.04 phr). This initial mixture was partially
25 polymerized by ultraviolet radiation under nitrogen atmosphere until the Brookfield viscosity was between 1 and 3 Pa·s (1000 and 3000 centipoises). Following partial polymerization, 2,2-dimethoxy-2-phenyl acetophenone initiator (0.2 phr) was added along with 1,6-hexanediol diacrylate crosslinker (0.03 phr) and fumed silica (10 phr, AEROSIL R300). The resulting mixture was mixed thoroughly using a propeller mixer. A coating with a wet thickness of
30 50 micrometers of the syrup was applied to a polyethylene phthalate film treated with silicone release (Teijin DuPont Films Japan Ltd.). The coating was exposed to UVA

(ultraviolet radiation) light with a dosage of about 900 mJ per square centimeters for the curing process to take place.

Preparatory Example 4 – Pressure-sensitive Adhesive D

Another pressure-sensitive adhesive layer was prepared using the procedure of Preparatory Example 3 except that fumed silica AEROSIL R300 (10 phr) was replaced with fumed silica AEROSIL R972 (10 phr).

Preparatory Example 5 – Pressure-sensitive Adhesive E

Another pressure-sensitive adhesive layer was prepared using the procedure of Preparatory Example 3 except that the monovalent monomers were replaced with isooctyl acrylate (90 phr) and tert-octyl acrylamide (10 phr) and the fumed silica was replaced with AEROSIL R972 (10 phr).

Preparatory Example 6 – Pressure-sensitive Adhesive F

Another pressure-sensitive adhesive layer was prepared using the procedure of Preparatory Example 3 except that the monovalent monomers were replaced with isooctyl acrylate (90 phr) and tert-octyl acrylamide (10 phr). The fumed silica was replaced with AEROSIL R972 (5 phr).

Preparatory Example 7 – Pressure-sensitive Adhesive G

Another pressure-sensitive adhesive layer was prepared as described for Preparatory Example 1 except that silica aerogel powder (10 phr, NANOGEL grade OBD201) was mixed with the syrup before coating.

Example 1

A syrup was prepared from an initial mixture that contained 2-ethylhexyl acrylate (66 parts), isobornyl acrylate (22 parts), acrylic acid (10 parts), and 2,2-dimethoxy-2-phenyl acetophenone initiator (0.04 phr). This initial mixture was partially polymerized by ultraviolet radiation under nitrogen atmosphere until the Brookfield viscosity was between 1 and 3 Pa·s (1000 and 3000 centipoise). Following partial polymerization, neopentylglycol hydroxypivalate diacrylate modified caprolactone (0.1 phr) and additional 2,2-dimethoxy-

WE CLAIM:

1. An adhesive tape comprising:
 - a backing layer comprising
 - (1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture comprising
 - (a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and
 - (b) either
 - (i) a first monovalent monomer mixture comprising
 - 1) a low T_g yielding acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low T_g yielding acrylic monomer has a glass transition temperature no greater than 20°C when polymerized to form a homopolymer; and
 - 2) a first polar monomer in an amount up to 35 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture; or
 - (ii) a partially polymerized product of the first monovalent monomer mixture; and
 - at least one pressure-sensitive adhesive layer that is adjacent to a major surface of the backing layer, wherein the pressure-sensitive adhesive layer comprises
 - (1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymerizable material in the second polymerizable reaction mixture; and

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon atoms in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; and

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the total weight of second acrylic copolymer,

wherein, the adhesive tape is stretch releasing and is stretchable at least 50 percent in a first direction without breaking.

2. The adhesive tape of claim 1, wherein the backing layer further comprises inorganic particles dispersed or suspended in the first acrylic copolymer.

3. The adhesive tape of claim 1 or 2, wherein the first monovalent monomer mixture further comprises a high Tg yielding acrylic monomer in an amount up to 40 weight percent based on the total weight of the first polymerizable reaction mixture, wherein the high Tg yielding acrylic monomer has a Tg of at least 40°C when polymerized to form a homopolymer.

4. The adhesive tape of any one of claims 1 to 3, wherein the adhesive tape is stretchable at least 300 percent in the first direction without breaking.
5. The adhesive tape of any one of claim 1 to 4, wherein the inorganic particles in the pressure-sensitive adhesive layer comprises silica.
6. The adhesive tape of claim 5, wherein the silica is selected from fumed silica or silica aerogel particles.
7. An article comprising:
 - a first substrate;
 - a second substrate; and
 - an adhesive tape positioned between the first substrate and the second substrate, wherein the adhesive tape couples the first substrate to the second substrate and wherein the adhesive tape comprising
 - (A) a backing layer comprising
 - (1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture comprising
 - (a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and
 - (b) either
 - (i) a first monovalent monomer mixture comprising
 - 1) a low Tg yielding acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg yielding acrylic monomer has a glass

transition temperature no greater than 20°C when polymerized to form a homopolymer; and

2) a first polar monomer in an amount up to 35 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture; or

(ii) a partially polymerized product of the first monovalent monomer mixture; and

(B) a first pressure-sensitive adhesive layer that is adjacent to a first major surface of the backing layer and a second pressure-sensitive adhesive layer that is adjacent to a second major surface of the backing layer, wherein the first pressure-sensitive adhesive layer and the second pressure-sensitive adhesive layer each comprise

(1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymerizable material in the second polymerizable reaction mixture; and

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; and

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the weight of the second acrylic copolymer; and

(C) a tab that extends beyond at least one of the first substrate and the second substrate, wherein pulling the tab stretches the adhesive tape and releases the adhesive tape from the first substrate, from the second substrate, or from both the first substrate and the second substrate and wherein the adhesive tape is stretchable to at least 50 percent in a first direction without breaking when the tab is pulled.

8. The article of claim 7, wherein the adhesive tape is optically clear and wherein first substrate and second substrate are each independently selected from a display, polarizer, touch panel, lens, reflector, diffraction grating, mirror, projection prism, or multilayer optical film.

9. The article of claim 7 or 8, wherein the adhesive tape is optically clear the second substrate is visible when viewed through the first substrate and the adhesive tape.

10. The article of any one of claims 7-to 9, wherein the backing layer further comprises inorganic particles dispersed or suspended in the first acrylic copolymer.

11. The article of any one of claim 7 to 10, wherein the first monovalent monomer mixture further comprises a high Tg yielding acrylic monomer in an amount up to 40 weight percent based on the total weight of the first polymerizable reaction mixture,

wherein the high Tg yielding acrylic monomer has a Tg of at least 40°C when polymerized to form a homopolymer.

12. The article of any one of claims 7 to 11, wherein the adhesive tape is stretchable to at least 300 percent in the first direction without breaking.

13. An article comprising:

a first substrate; and

an adhesive tape adhered to the first substrate, the adhesive tape comprising

(A) a backing layer comprising

(1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture comprising

(a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and

(b) either

(i) a first monovalent monomer mixture comprising

1) a low Tg yielding acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg yielding acrylic monomer has a glass transition temperature no greater than 20°C when polymerized to form a homopolymer; and

2) a first polar monomer in an amount up to 35 weight percent based on the total

weight of polymerizable material in the first polymerizable reaction mixture; or

(ii) a partially polymerized product of the first monovalent monomer mixture; and

(B) a first pressure-sensitive adhesive layer that is adjacent to a first major surface of the backing layer, wherein the first pressure-sensitive adhesive layer comprises

(1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymerizable material in the second polymerizable reaction mixture; and

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; and

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the weight of the second acrylic copolymer; and

(C) a tab that extends beyond the first substrate, wherein pulling the tab stretches the adhesive tape and releases the adhesive tape from the first substrate and wherein the adhesive tape is stretchable to at least 50 percent in a first direction without breaking when the tab is pulled.

14. A method of coupling and decoupling two substrates, the method comprising:
providing a first and second substrate;
positioning the an adhesive tape between the first substrate and the second substrate, wherein the adhesive tape couples the first substrate to the second substrate, the adhesive tape comprising

(A) a backing layer comprising

(1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture that comprises

(a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and

(b) either

(i) a first monovalent monomer mixture comprising

1) a low Tg yielding acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg yielding acrylic monomer has a glass transition temperature no greater than 20°C

when polymerized to form a homopolymer;
and

2) a first polar monomer in an amount
up to 35 weight percent based on the total
weight of polymerizable material in the first
polymerizable reaction mixture; or

(ii) a partially polymerized product of the first
monovalent monomer mixture; and

(B) a first pressure-sensitive adhesive layer that is adjacent to a first
major surface of the backing layer and a second pressure-sensitive adhesive layer
that is adjacent to a second major surface of the backing layer, wherein the first
pressure-sensitive adhesive layer and the second pressure-sensitive adhesive layer
each comprise

(1) a second acrylic copolymer that is different than the first
acrylic copolymer, the second acrylic copolymer comprising a second
polymerized product of a second polymerizable reaction mixture
comprising

(a) a second crosslinker having at least two
(meth)acryloyl groups in an amount up to 25 weight percent based
on a total weight of polymeric material in the second
polymerizable reaction mixture;

(b) either

(i) a second monovalent monomer mixture
comprising

1) an alkyl (meth)acrylate having an
alkyl group with at least 4 carbon in an amount
equal to at least 40 weight percent based on the total
weight of polymerizable material in the second
polymerizable reaction mixture;

2) a second polar monomer in an
amount up to 40 weight percent based on the total

weight of polymerizable material in the second
polymerizable reaction mixture; or

(ii) a partially polymerized product of the
second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second
acrylic copolymer in an amount up to 25 weight percent based on the
weight of the second acrylic copolymer; and

(C) a tab that extends beyond at least one of the first substrate and the
second substrate, and

pulling on the tab of the adhesive tape to stretch the adhesive tape to release the
adhesive tape from the first substrate, from the second substrate or from both the first
substrate and the second substrate, wherein the adhesive tape is stretchable to at least 50
percent in a first direction without breaking.

15. The method of claim 14, wherein the backing layer further comprises up to 25
weight percent inorganic particles dispersed or suspended in the first acrylic copolymer.

16. The method of claim 14 or 15, wherein the adhesive tape is optically clear and
wherein first substrate and second substrate are each independently selected from a
display, polarizer, touch panel, lens, reflector, diffraction grating, mirror, projection
prism, or multilayer optical film.

WE CLAIM:

1. An adhesive tape comprising:
a backing layer comprising
 - (1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture comprising
 - (a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and
 - (b) either
 - (i) a first monovalent monomer mixture comprising
 - 1) a low Tg acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg acrylic monomer has a glass transition temperature no greater than 20°C when polymerized to form a homopolymer; and
 - 2) a first polar monomer in an amount up to 35 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture; or
 - (ii) a partially polymerized product of the first monovalent monomer mixture; and
 - at least one pressure-sensitive adhesive layer that is adjacent to a major surface of the backing layer, wherein the pressure-sensitive adhesive layer comprises
 - (1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymerizable material in the second polymerizable reaction mixture; and

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon atoms in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; and

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the total weight of second acrylic copolymer,

wherein, the adhesive tape is stretch releasing and is stretchable at least 50 percent in a first direction without breaking.

2. The adhesive tape of claim 1, wherein the backing layer further comprises inorganic particles dispersed or suspended in the first acrylic copolymer.

3. The adhesive tape of claim 1 or 2, wherein the first monovalent monomer mixture further comprises a high Tg yielding acrylic monomer in an amount up to 40 weight percent based on the total weight of the first polymerizable reaction mixture, wherein the high Tg acrylic monomer has a Tg of at least 40°C when polymerized to form a homopolymer.

4. The adhesive tape of any one of claims 1 to 3, wherein the adhesive tape is stretchable at least 300 percent in the first direction without breaking.
5. The adhesive tape of any one of claim 1 to 4, wherein the inorganic particles in the pressure-sensitive adhesive layer comprises silica.
6. The adhesive tape of claim 5, wherein the silica is selected from fumed silica or silica aerogel particles.
7. An article comprising:
a first substrate; and
an adhesive tape adhered to the first substrate, the adhesive tape comprising
 - (A) a backing layer comprising
 - (1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture comprising
 - (a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and
 - (b) either
 - (i) a first monovalent monomer mixture comprising
 - 1) a low Tg acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg acrylic monomer has a glass transition temperature no greater than 20°C when polymerized to form a homopolymer; and

2) a first polar monomer in an amount up to 35 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture; or

(ii) a partially polymerized product of the first monovalent monomer mixture; and

(B) a first pressure-sensitive adhesive layer that is adjacent to a first major surface of the backing layer, wherein the first pressure-sensitive adhesive layer comprises

(1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymerizable material in the second polymerizable reaction mixture; and

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; and

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the weight of the second acrylic copolymer; and

(C) a tab that extends beyond the first substrate, wherein pulling the tab stretches the adhesive tape and releases the adhesive tape from the first substrate and wherein the adhesive tape is stretchable to at least 50 percent in a first direction without breaking when the tab is pulled.

8. The article of claim 7, further comprising a second substrate and wherein the adhesive tape further comprises a second pressure-sensitive adhesive layer that is adjacent to a second major surface of the backing layer, the second pressure-sensitive adhesive layer comprising the second acrylic copolymer; and wherein the second pressure-sensitive adhesive layer is adhered to the second substrate.

9. The article of claim 8, wherein the adhesive tape is optically clear and wherein first substrate and second substrate are each independently selected from a display, polarizer, touch panel, lens, reflector, diffraction grating, mirror, projection prism, or multilayer optical film.

10. The article of claim 8 or 9, wherein the adhesive tape is optically clear the second substrate is visible when viewed through the first substrate and the adhesive tape.

11. The article of any one of claims 8 to 10, wherein the backing layer further comprises inorganic particles dispersed or suspended in the first acrylic copolymer.

12. The article of any one of claim 8 to 11, wherein the first monovalent monomer mixture further comprises a high Tg acrylic monomer in an amount up to 40 weight percent based on the total weight of the first polymerizable reaction mixture, wherein the high Tg yielding acrylic monomer has a Tg of at least 40°C when polymerized to form a homopolymer.

13. The article of any one of claims 7 to 11, wherein the adhesive tape is stretchable to at least 300 percent in the first direction without breaking.

14. A method of coupling and decoupling two substrates, the method comprising:
providing a first and second substrate;
positioning the an adhesive tape between the first substrate and the second substrate, wherein the adhesive tape couples the first substrate to the second substrate, the adhesive tape comprising

(A) a backing layer comprising

(1) a first acrylic copolymer comprising a first polymerized product of a first polymerizable reaction mixture that comprises

(a) a first crosslinker having at least two (meth)acryloyl groups in an amount up to 70 weight percent based on a total weight of polymerizable material in the first polymerizable reaction mixture; and

(b) either

(i) a first monovalent monomer mixture comprising

1) a low Tg acrylic monomer in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture, wherein the low Tg acrylic monomer has a glass transition temperature no greater than 20°C when polymerized to form a homopolymer; and

2) a first polar monomer in an amount up to 35 weight percent based on the total weight of polymerizable material in the first polymerizable reaction mixture; or

(ii) a partially polymerized product of the first monovalent monomer mixture; and

(B) a first pressure-sensitive adhesive layer that is adjacent to a first major surface of the backing layer and a second pressure-sensitive adhesive layer that is adjacent to a second major surface of the backing layer, wherein the first pressure-sensitive adhesive layer and the second pressure-sensitive adhesive layer each comprise

(1) a second acrylic copolymer that is different than the first acrylic copolymer, the second acrylic copolymer comprising a second polymerized product of a second polymerizable reaction mixture comprising

(a) a second crosslinker having at least two (meth)acryloyl groups in an amount up to 25 weight percent based on a total weight of polymeric material in the second polymerizable reaction mixture;

(b) either

(i) a second monovalent monomer mixture comprising

1) an alkyl (meth)acrylate having an alkyl group with at least 4 carbon in an amount equal to at least 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture;

2) a second polar monomer in an amount up to 40 weight percent based on the total weight of polymerizable material in the second polymerizable reaction mixture; or

(ii) a partially polymerized product of the second monovalent monomer mixture; and

(2) inorganic particles dispersed or suspended in the second acrylic copolymer in an amount up to 25 weight percent based on the weight of the second acrylic copolymer; and

(C) a tab that extends beyond at least one of the first substrate and the second substrate; and

pulling on the tab of the adhesive tape to stretch the adhesive tape to release the adhesive tape from the first substrate, from the second substrate or from both the first substrate and the second substrate, wherein the adhesive tape is stretchable to at least 50 percent in a first direction without breaking.

15. The method of claim 14, wherein the backing layer further comprises up to 25 weight percent inorganic particles dispersed or suspended in the first acrylic copolymer.

16. The method of claim 14 or 15, wherein the adhesive tape is optically clear and wherein first substrate and second substrate are each independently selected from a display, polarizer, touch panel, lens, reflector, diffraction grating, mirror, projection prism, or multilayer optical film.