UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CLEARCORRECT OPERATING, LLC.,
Petitioner,

v.

ALIGN TECH., INC.,
Patent Owner,

Case Nos. IPR2025-00818
IPR2025-00819
IPR2025-00820
IPR2025-00821
Patent Nos. 10,973,613,
11,154,384,
11,648,090,
11,648,091

Declaration of Kelley M Hayes Greenhill Regarding Internet Archive URL's

I, Kelley M Hayes Greenhill, state and declare as follows:

I. Introduction

1. I have prepared this Declaration in connection with *Inter Partes* Review proceedings of U.S. Patent Nos. 10,973,613; 11,154,384; 11,648,090; and 11,648,091, instituted as IPR2025-00818, -819, -820, and -821, respectively.

2. I am currently the Director of Research and Information Services at Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, located at 901 New York Ave., NW, Washington DC 20001.

3. I am over eighteen years of age and am competent to make this Declaration. I make this Declaration based upon my own personal knowledge and my professional knowledge of library science practices.

4. I earned a Master of Science in Library and Information Science degree from the Catholic University of America in 1995, and a Bachelor of Arts in Political Science degree from Duquesne University in 1989. I have worked as a law librarian for over thirty years. I have been employed by Finnegan, Henderson, Farabow, Garrett & Dunner, LLP since 2019. Before that, from 2015 to 2019, I was employed as a Research Librarian at Northrop Grumman Corporation, and from 1995 to 2015, I was employed as a Law Library Manager for Sterne, Kessler, Goldstein & Fox, p.l.l.c.

II. Standard Library Practice for Receiving, Cataloging, and Making Materials, Publicly Available and Accessible

5. I have knowledge of and experience with standard library practices regarding the receipt, cataloging, searching, accessing, and making print and electronic materials available and accessible to the public. I also have knowledge of and experience with searching, identifying, and downloading materials from the Internet Archive located at https://web.archive.org/

III. The Internet Archive

6. The Internet Archive is a 501(c)(3) non-profit founded in 1996. Its core mission is to provide "universal access to all knowledge" by permanently preserving digital cultural artifacts and offering free public access to them. It is a publicly available digital library of Internet sites and other cultural artifacts that can be searched and accessed in digital form. Like a physical library, it provides free access to everyone.

7. The Internet Archive created a resource known as the "Wayback Machine" (https://web.archive.org/). The Wayback Machine is named in reference to the famous Mr. Peabody's WABAC (pronounced way-back) machine from the Rocky and Bullwinkle cartoon show. If you want to see what a webpage looked like last year, ten years ago, or in 1999, use the Wayback Machine. You provide it with a web address (a URL), and it shows you a calendar of snapshots over time, in the past.

8. The Wayback Machine makes it possible to search and browse more than 450 billion publicly available web pages stored in the Internet Archive's web archive. Visitors to the Wayback Machine can search the Archive by keyword or a website URL. If archived records for a URL or the key words are available, the visitor will be presented with a display of available dates. The visitor may select one of those dates and be taken to the collection of web captures associated with the specific web crawl and point (date) in time the capture came from.

9. This archived data made viewable by the Wayback Machine is obtained using web archiving software that automatically stores copies of files available via the Internet, each file preserved as it existed at a particular point in time.

10. The Internet Archive assigns a URL to all archived files within the Wayback Machine in the following format: http://web.archive.org/web/[Year in yyyy][Month in mm][Day in dd][Time code inhh:mm:ss]/[Archived URL]. This is known as an "extended URL" format.

11. For example, the Internet Archive extended URL http://web.archive.org/web/19970126045828/http://www.archive.org/ denotes the URL for the record of the Internet Archive home page archived on January 26, 1997 at 4:58 a.m. and 28 seconds (1997/01/26 at 04:58:28).

IV. Public Availability of *Internet Archive URL's*

This Declaration relates to the public availability for the following references appended as Appendices A-F:

Appendix A

12. **Appendix A** is Align Technology, patents website, dated March 9, 2026,https://web.archive.org/web/20260309051347/https:/www.aligntech.com/patents. ("*Align Tech patents*").

13. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *Align Tech patents,* reference, and reviewed the reference URL to determine the date of its public availability.

14. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the search term "aligntech.com/patents" which took me to a page displaying the 2 URL's captured for the URL prefix: https://web.archive.org/web/*/aligntech.com/patents*. I then navigated to the URL's mentioning alightech.com/patents, reviewed them, and then chose (clicked on) the extended URL https://www.aligntech.com/patents which was saved 70 times between September 22, 2019 and May 13, 2026. I next clicked on the year "2026" and then the first snapshot listed under March 9, 2026 detailed as 05:13:47. This took me to the following extended URL:

https://web.archive.org/web/20260309051347/https://www.aligntech.com/patents, which is the *Align Tech patents,* reference attached here as **Appendix A**.

15. The date details of extended URL https://web.archive.org/web/20260309051347/https://www.aligntech.com/patents, as outlined above, reveal that *Align Tech patents* was archived by the Wayback Machine on March 9, 2026, at 5:13 a.m. and 47 seconds.

16. Based on the information in Appendix A and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine, members of the interested public could have accessed Align Tech patents by searching the Internet Archive's Wayback Machine at or after March 9, 2026, at 5:13 a.m. and 47 seconds.

Appendix B

17. **Appendix B** is Bay Materials Announces Zendurz® FLX ™ Thermoformable Material for Orthodontic Clear Aligner Therapy Appliances, Cision PR Newswire, dated November 28, 2018, https://web.archive.org/web/20190527023742/https:/www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html. ("*Cision Press Release*").

18. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *Cision Press Release,* reference, and reviewed the reference URL to determine the date of its public availability.

19. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the following link "www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html" which took me to a page displaying 1 URL for the URL prefix: https://web.archive.org/web/*/www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html*. I then navigated to the URL's mentioning *Cision Press Release*, reviewed them, and then chose (clicked on) the extended URL https://web.archive.org/web/*/www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html* which was saved 4 times between May 27, 2019 and January 18, 2022. I next clicked on the year "2019" and then the first snapshot listed under May 27, 2019 detailed as 02:37:42. This took me to the

following extended URL:

https://web.archive.org/web/20190527023742/https://www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html, which is the *Cision Press Release,* reference attached here as **Appendix B**.

20. The date details of extended URL https://web.archive.org/web/20190527023742/https://www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html as outlined above, reveal that *Cision Press Release* was archived by the Wayback Machine on May 27, 2019, at 2:37 a.m. and 42 seconds.

21. Based on the information in **Appendix B** and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine**,** members of the interested public could have accessed *Cision Press Release* by searching the Internet Archive's Wayback Machine at or after May 27, 2019, at 2:37 a.m. and 42 seconds.

Appendix C

22. **Appendix C** is Eastman Tritan Copolyester FX200, Product Data Sheet, dated March 29, 2010, https://web.archive.org/web/20110928075902/http://ws.eastman.com/ProductC

atalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060, ("*Copolyester FX200*").

23. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *Copolyester FX200,* reference, and reviewed the reference URL to determine the date of its public availability.

24. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the link "ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060" which took me to a page displaying a timeline and calendars for the URL prefix: https://web.archive.org/web/20260000000000*/ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060. I then clicked on the year "2011" and then the first snapshot listed under September 28, 2011 detailed as 7:59:02. This took me to the following extended URL: https://web.archive.org/web/20110928075902/ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060, which is the *Copolyester FX200,* reference attached here as **Appendix C**.

25. The date details of extended URL https://web.archive.org/web/20110928075902/ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71069060 as outlined above, reveal that *Copolyester FX200* was archived by the Wayback Machine on September 28, 2011, at 7:59 a.m. and 2 seconds.

26. Based on the information in **Appendix C** and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine**,** members of the interested public could have accessed C*opolyester FX200* by searching the Internet Archive's Wayback Machine at or after September 28, 2011, at 7:59 a.m. and 2 seconds.

Appendix D

27. **Appendix D** is Invisalign website, *21M smiles. 21M lives changed*. dated March 27, 2026, https://web.archive.org/web/20260327233208/invisalign.com/provider, ("*21M smiles. 21M lives changed.*").

28. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *21M smiles. 21M lives changed.,* reference, and reviewed the reference URL to determine the date of its public availability.

29. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the

homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the search term "Invisalign.com/provider" which took me to a page displaying the 2,203 URL's captured for the URL prefix: https://web.archive.org/web/*/invisalign.com/provider*. I then navigated to the URL's mentioning Invisalign.com provider, reviewed them, and then chose (clicked on) the extended URL https://web.archive.org/web/20260518204227*/http://www.invisalign.com:80/provider which was saved 273 times between November 17, 2011 and May 18, 2026. I next clicked on the year "2026" and then the first snapshot listed under March 27, 2026 detailed as 23:32:08. This took me to the following extended URL: https://web.archive.org/web/20260327233208/http://www.invisalign.com/provider, which is the *21M smiles. 21M lives changed.,* reference attached here as **Appendix D**.

30. The date details of extended URL https://web.archive.org/web/20260327233208/http://www.invisalign.com/provider, as outlined above, reveal that *21M smiles. 21M lives changed.* was archived by the Wayback Machine on March 27, 2026, at 11:32 p.m. and 8 seconds.

31. Based on the information in **Appendix D** and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine**,**

members of the interested public could have accessed *21M smiles. 21M lives changed.* by searching the Internet Archive's Wayback Machine at or after March 27, 2026, at 11:32 p.m. and 8 seconds.

Appendix E

32. **Appendix E** is Eastman Tritan ™ copolyester FX100, Technical Data Sheet, dated April 22, 2021, https://web.archive.org/web/20240415114925/https://productcatalog.eastman.com/tds/ProdDatasheet.aspx?product=71068695&pn=eastman-tritan-fx100-copolyester ("*copolyester FX100*").

33. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *copolyester FX100,* reference, and reviewed the reference URL to determine the date of its public availability.

34. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the search term https://productcatalog.eastman.com/tds/" which took me to a page displaying a 2,762 URL's captured for the URL prefix: https://web.archive.org/web/*/https://productcatalog.eastman.com/tds/*. I then navigated to the URL's mentioning "fx100",

https://web.archive.org/web/20240415000000*/http://productcatalog.eastman.com/tds/ProdDatasheet.aspx?product=71068695&pn=eastman-tritan-fx100-copolyester, clicked on the year "2024" and then the first snapshot listed under April 15, 2024 detailed as 11:49:25. This took me to the following extended URL: https://web.archive.org/web/20240415114925/productcatalog.eastman.com/tds/ProdDatasheet.aspx?product=71068695&pn=eastman-tritan-fx100-copolyester, which is the *copolyester FX100,* reference attached here as **Appendix E**.

35. The date details of extended URL https://web.archive.org/web/20240415114925/http://productcatalog.eastman.com/tds/ProdDatasheet.aspx?product=71068695&pn=eastman-tritan-fx100-copolyester as outlined above, reveal that *copolyester FX100* was archived by the Wayback Machine on April 15, 2024, at 11:49 a.m. and 25 seconds.

36. Based on the information in **Appendix E** and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine**,** members of the interested public could have accessed *copolyester FX100* by searching the Internet Archive's Wayback Machine at or after April 15, 2024, at 11:49 a.m. and 25 seconds.

Appendix F

37. **Appendix F** is Eastman Tritan ™ copolyester FX100, Product Data Sheet, dated March 30,

2010, https://web.archive.org/web/20140122132516/http://ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695 ("*Tritan Copolyester FX100*").

38. As detailed in the steps below, I searched the Internet Archive's Wayback Machine, located the *Tritan Copolyester FX100,* reference, and reviewed the reference URL to determine the date of its public availability.

39. I first navigated to the Internet Archive website at https://archive.org/. I next navigated to The Wayback Machine (which is prominently displayed on the homepage of the Internet Archive website) and clicked on its URL: https://web.archive.org/. In the search box, I entered the following link ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695 which took me to a page displaying a timeline and calendar with URL's captured for the URL prefix: https://web.archive.org/web/20140101000000*///ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695. I then clicked on the year "2014" and then the first snapshot listed under January 22, 2014 detailed as 13:25:16. This took me to the following extended URL: https://web.archive.org/web/20140122132516///ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695, which is the *Tritan Copolyester FX100,* reference attached here as **Appendix F**.

40. The date details of extended URL https://web.archive.org/web/20140122132516///ws.eastman.com/ProductCatalogApps/PageControllers/ProdDatasheet_PC.aspx?product=71068695 as outlined above, reveal that *Tritan Copolyester FX100* was archived by the Wayback Machine on January 22, 2014, at 1:25 p.m. and 16 seconds.

41. Based on the information in **Appendix F** and my search and review of the aforementioned documents on the Internet Archive's Wayback Machine**,** members of the interested public could have accessed *Tritan* C*opolyester FX100* by searching the Internet Archive's Wayback Machine at or after January 22, 2014, at 1:25 p.m. and 16 seconds.

V. Conclusion

42. I declare that all statements made herein of my knowledge are true, that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

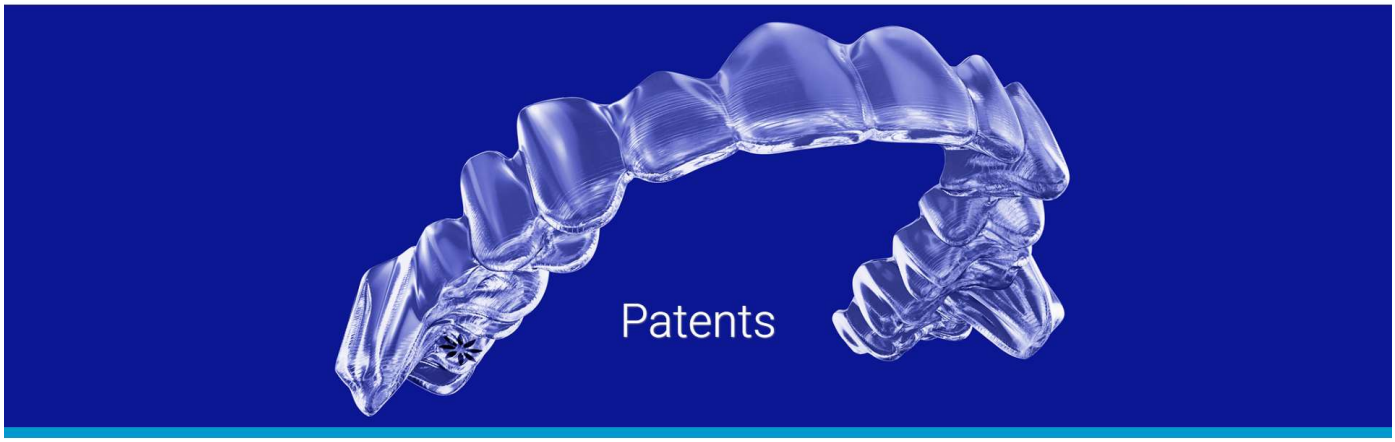
Dated: May 29, 2026.

Kelley Hayes Greenhill

Kelley M Hayes Greenhill

APPENDIX A

INTERNET ARCHIVE Wayback Machine
https://www.aligntech.com/patents
Go JAN MAR MAY 09 2025 2026 2027
70 captures
22 Sep 2019 - 13 May 2026
About this capture



Patents

Align Technology is a global medical device company that is changing lives through better smiles. We reimagine and reinvent the way dental treatment is presented and delivered to millions of people around the world. We are a leading provider of advanced digital dentistry platforms. The following Align Technology products are protected by patents in the United States and elsewhere. This web page is provided to satisfy the virtual patent marking provisions of various jurisdictions including the virtual patent marking provisions of Section 16 of the America Invents Act. It is also intended to serve as notice under 35 U.S.C. § 287(a). Other products not listed here may be protected by one or more patents in the United States and elsewhere. Additional patents are pending in the United States and elsewhere.

invisalign

The Invisalign® process and family of clear aligner products (including, but not limited to, Invisalign® Comprehensive Package, Invisalign® Comprehensive Phase 2 Package, Invisalign® Lite Package, Invisalign® Express Package, Invisalign® retainers, Invisalign® Express 5, Invisalign® Express 10, Invisalign® Assist, Invisalign® GO clear aligners, Vivera® retainers, Invisalign® First clear aligners, and Invisalign Palatal Expander) are covered by one or more of the following U.S. Patents and other pending applications and foreign equivalents:

US 7,553,157
US 7,711,447
US 7,854,609
US 7,878,805
US 7,916,911
US 8,038,444
US 8,155,780
US 8,641,414
US 8,899,976
US 8,899,977
US 8,995,732
US 9,004,915
US 9,107,722
US 9,301,814
US 9,326,830
US 9,403,238
US 9,433,477
US 9,566,132
US 9,655,691
US 9,655,693
US 9,839,494
US 9,844,421
US 9,939,999
US 9,943,386
US 9,943,991
US 10,004,578
US 10,052,176
US 10,085,823
US 10,123,853
US 10,136,964
US 10,143,537
US 10,271,923
US 10,299,894
US 10,335,252
US 10,405,947
US 10,420,631
US 10,421,152
US 10,456,217
US 10,501,214
US 10,512,524
US 10,537,405
US 10,537,406
US 10,524,879
US 10,595,965
US 11,194,312
US 11,202,691
US 11,213,368
US 11,213,369
US 11,234,794
US 11,241,758
US 11,247,242
US 11,259,896
US 11,273,011
US 11,278,375
US 11,284,972
US 11,284,973
US 11,284,974
US 11,295,444
US 11,298,211
US 11,304,779
US 11,334,996
US 11,344,385
US 11,357,598
US 11,369,456
US 11,376,100
US 11,379,097
US 11,382,720
US 11,382,721
US 11,383,322
US 11,389,272
US 11,395,717
US 11,417,431
US 11,420,362
US 11,426,259
US 11,449,191
US 11,453,156
US 11,464,604
US 11,471,253
US 11,478,334
US 11,484,389
US 11,484,395
US 11,490,996
US 11,497,584
US 11,521,732
US 11,529,215
US 11,534,861
US 11,547,532
US 11,553,988

iTero

The iTero® family of intraoral scanner products (including, but not limited to, iTero Lumina, iTero Element 5D, iTero Element 2, iTero Element Flex, iTero Element, iTero HD2.9, iTero HDU) are covered by one or more of the following U.S. Patents and other pending applications and foreign equivalents:

US 7,286,954
US 7,319,529
US 7,890,290
US 8,948,482
US 9,214,014
US 9,299,192
US 9,431,887
US 9,491,863
US 9,510,757
US 9,589,329
US 9,660,418
US 9,675,430
US 9,709,803
US 9,830,688
US 9,939,999
US 10,004,572
US 10,105,199
US 10,111,581
US 10,117,581
US 10,148,066
US 10,219,875
US 10,275,862
US 10,288,875
US 10,327,872
US 10,390,913
US 10,405,951
US 10,470,846
US 10,485,639
US 10,499,793
US 10,507,087
US 10,507,088
US 10,507,089
US 10,568,722
US 10,599,227
US 10,603,136
US 10,610,107
US 10,600,160
US 10,624,720
US 10,702,164
US 10,709,527
US 10,756,511
US 10,772,506
US 10,779,914
US 10,791,934
US 10,791,936
US 10,835,128
US 10,884,238
US 10,888,400
US 10,898,077
US 10,945,609
US 10,952,827
US 10,964,425
US 11,007,039
US 11,134,834
US 11,135,039
US 11,147,458
US 11,152,106
US 11,202,574
US 11,238,586
US 11,284,802
US 11,321,817
US 11,369,271
US 11,357,603
US 11,392,210
US 11,422,362
US 11,426,053
US 11,426,077
US 11,439,483
US 11,455,727
US 11,523,885
US 11,638,525
US 11,672,631
US 11,678,953
US 11,690,517
US 11,759,277
US 11,844,153
US 11,896,461
US 11,911,240
US 11,928,832
US 11,930,154
US 11,826,225
US 11,563,929
US 11,950,880
US 11,950,981
US 11,954,262
US 11,972,572

US 10,595,966
US 10,610,332
US 10,613,515
US 10,646,307
US 10,650,517
US 10,653,502
US 10,653,503
US 10,695,956
US 10,702,357
US 10,722,328
US 10,729,515
US 10,733,805
US 10,758,321
US 10,758,322
US 10,766,055
US 10,773,337
US 10,779,915
US 10,783,629
US 10,789,394
US 10,813,721
US 10,828,130
US 10,828,719
US 10,893,918
US 10,888,395
US 10,912,627
US 10,912,629
US 10,925,690
US 10,970,839
US 10,973,611
US 10,973,613
US 10,980,616
US 10,996,813
US 11,000,350
US 11,004,159
US 11,007,036
US 11,007,037
US 11,109,946
US 11,013,582
US 11,020,206
US 11,024,431
US 11,026,766
US 11,033,359
US 11,033,360
US 11,033,362
US 11,077,966
US 11,086,490
US 11,096,763
US 11,103,330
US 11,116,605
US 11,129,694
US 11,138,727
US 11,141,243
US 11,154,381
US 11,154,384
US 11,564,777
US 11,565,441
US 11,567,472
US 11,571,277
US 11,576,753
US 11,576,754
US 11,589,743
US 11,596,499
US 11,623,368
US 11,628,044
US 11,631,176
US 11,633,261
US 11,633,877
US 11,642,195
US 11,648,087
US 11,648,089
US 11,648,090
US 11,648,091
US 11,651,494
US 11,654,001
US 11,654,003
US 11,660,167
US 11,667,412
US 11,672,629
US 11,678,954
US 11,678,956
US 11,701,203
US 11,707,344
US 11,714,398
US 11,717,384
US 11,717,381
US 11,717,380
US 11,723,753
US 11,730,574
US 11,737,852
US 11,737,853
US 11,744,451
US 11,744,676
US 11,751,974
US 11,752,523
US 11,766,313
US 11,766,314
US 11,771,526
US 11,786,341
US 11,801,121
US 11,801,124
US 11,810,207
US 11,809,214
US 11,823,356
US 11,839,520
US 11,850,111
US 11,850,680
US 11,890,159
US 11,890,160
US 11,897,181
US 11,903,793
US 11,911,929
US 11,925,525
US 11,937,991
US 11,950,977
US 11,958,248
US 11,962,892
US 11,969,311
US 11,972,873
US 11,974,896
US 11,974,897
US 11,974,898
US 11,975,463
US 11,978,547
US 11,980,523
US 11,985,414
US 11,986,369
US 11,991,439
US 11,991,440
US 11,992,382
US 11,998,418
US 12,004,919
US 12,016,745
US 12,016,748
US 12,023,216
US 12,036,084
US 12,036,087
US 12,036,093
US 12,048,604
US 12,048,605
US 12,048,606
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US 12,390,311

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US D760,901
US D768,861
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US D774,193
US D806,248
US D816,222
US D816,223
US D925,739
US D1,026,227
US D1,042,842
US D1,061,895
US D1,073,069
US D1,089,653

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US D1,063,077
US D1,064,272

Last updated September 30, 2025

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APPENDIX B

https://www.prnewswire.com/news-releases/bay-materials-announces-zendura-flx-thermoformable-material-for-orthodontic-clear-aligner-therapy-appliances-300756563.html
4 captures
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Bay Materials Announces Zendura® FLX™ Thermoformable Material for Orthodontic Clear Aligner Therapy Appliances

Zendura®
Orthodontic Clear Aligner & Retainer Material

NEWS PROVIDED BY
Bay Materials →
Nov 28, 2018, 07:00 ET

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FREMONT, Calif., Nov. 28, 2018 /PRNewswire/ -- Bay Materials LLC, the industry leader in high performance thermoformable plastic materials for orthodontic clear aligner therapy, today announced the commercial release of Zendura® FLX™, an entirely new and unique material engineered specially for fabricating clear aligner appliances.

Studies show that clear aligner therapy continues to grow rapidly in the U.S. and internationally spurred by public demand for a more comfortable and satisfying method of orthodontic treatment.

Bay Materials announced the commercial release of Zendura® FLX™, an entirely new and unique plastic material engineered specially for fabricating clear aligner orthodontic appliances.

The latest addition to Bay's growing portfolio of clear aligner therapy materials, FLX provides patients with greater initial comfort, making the whole orthodontic treatment significantly more patient friendly, while also delivering teeth movement force superior to other commercially available aligner materials. FLX's greater elasticity allows it to more easily accommodate the use of engagers and treat a wider range of cases.

Zendura FLX generates 40% less initial force than earlier generation materials, providing greatly improved patient comfort and acceptance. FLX also retains 150% more orthodontic force after a normal wear period than competitive materials. Taken together, FLX's many standout features make it the new benchmark in performance and durability.

Engineered by a team of world-class material scientists to provide the optimum balance of elasticity, force retention, durability and clarity, the secret to FLX's superior performance is its elastomeric layer encased in a dual shell construction. The thin, rigid shells grip the teeth evenly and firmly, while the elastomeric layer applies gentle yet consistent, continual pressure to move teeth reliably and predictably over the prescribed period of time. The dual rigid shells also provide protection from bruxing.

"FLX is not intended to replace our standard Zendura material for fabricating orthodontic appliances," said Dr. Ray Stewart, founder and CEO of Bay Materials. "It will be the ideal aligner material for many cases, while our standard Zendura may be the better material for other cases. Our standard Zendura will remain unrivaled as a post-treatment retainer material."

FLX features a proprietary 3-layer design and is 0.030" (0.76mm) in thickness.

"Bay Materials' Zendura FLX aligner material appears to be light years ahead of the competition," said Kjeld Aamodt, DDS, MS. "My patients love it because its flexibility makes it more comfortable on day one of every stage and it stays virtually invisible. Not only is FLX best-in-class in clarity and stain resistance — you just can't see it — but also the material's teeth movement force and other physical properties allow my cases to track more predictably and reliably. I love what I'm seeing."

About Bay Materials

Bay Materials, founded in 2000, is a Silicon Valley-based polymer materials company engaged in manufacturing and marketing advanced materials for the orthodontic industry. Its Zendura brand of material is widely regarded as the best commercially available clear thermoplastic material for fabricating orthodontic clear aligners and post-treatment retainers.

Bay Materials also provides materials-intensive product development services for select companies. For more information, please visit www.baymaterials.com and www.zenduradental.com.

For further information contact:
Chip Hennen
650.566.0800 x313
chennen@baymaterials.com

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APPENDIX C

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EASTMAN

Product Data Sheet

Eastman Tritan Copolyester FX200

Application/Uses

- Consumer and durable goods
- Graphic Arts
- Leisure and safety
- Specialty films

Key Attributes

- Does not contain Bisphenol-A (BPA)
- Does not contain plasticizers
- Excellent clarity
- Good chemical resistance
- No pre-drying of film prior to thermoforming
- Tremendous toughness
- Very good heat resistance
- Wide thermoforming window

Product Description

Eastman Tritan FX200 is an amorphous copolyester that combines excellent clarity and toughness with outstanding heat and chemical resistance. Films manufactured from this new-generation copolyester can be thermoformed without pre-drying and with a wide processing window that allows for product designs that reflect intricate detail. *Eastman Tritan* FX200 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. *Eastman Tritan* FX200 copolyester is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

Typical Properties (Preliminary)

General Properties		
Thickness of Film Tested	ASTM D 374	0.254 mm (0.010 in.)
Density	ASTM D 1505	1.19 g/cm^3
Water Vapor Transmission Rate [d]		
@ 23°C (73°F)	ASTM F 1249	4 g/m^2·24h (0.3 g/100in.^{2}·24h)
@ 38°C (100°F)		10 g/m^2·24h (1 g/100in.^{2}·24h)
Gas Permeability, CO_2	ASTM D 1434	211 cm^3·mm/m^2·24h·atm (534 cm^3·mil/100in.^{2}·24h·atm)
Gas Permeability, O_2	ASTM D 3985	44 cm^3·mm/m^2·24h·atm (111 cm^3·mil/100in.^{2}·24h·atm)
Elmendorf Tear Resistance		
M.D.	ASTM D 1922	3.7 N (384 gf)
T.D.		4.2 N (433 gf)
PPT Tear Resistance		
M.D.	ASTM D 2582	40 N (9 lbf)
T.D.		40 N (9 lbf)
Tear Propagation Resistance, Split Tear Method [e]		
M.D.	ASTM D 1938	3 N (1 lbf)
M.D.		10 N/mm (55 lbf/in.)
T.D.		2 N (1 lbf)
T.D.		9 N/mm (51 lbf/in.)
Tear Resistance, Trouser @ 200 mm/min		
M.D.	ISO 6383-1	10 N/mm (56 lbf/in.)
T.D.		9 N/mm (52 lbf/in.)
Tensile Strength @ Yield		
M.D.	ASTM D 882	43 MPa (6300 psi)
T.D.		41 MPa (6000 psi)
Tensile Strength @ Break		
M.D.	ASTM D 882	57 MPa (8300 psi)
T.D.		42 MPa (5900 psi)
Elongation @ Yield		
M.D.	ASTM D 882	8%
T.D.		8%
Elongation @ Break		
M.D.	ASTM D 882	114%
T.D.		115%
Tensile Modulus		
M.D.	ASTM D 882	1500 MPa (2.2 x 10^5 psi)
T.D.		1400 MPa (2.1 x 10^5 psi)
Dart Impact [f]		
@ 23°C (73°F)	ASTM 1709A	825 g (1.82 lb)
@ -18°C (0°F)		825 g (1.82 lb)
@ -30°C (-22°F)		852 g (1.88 lb)
Puncture Resistance (Dynatup); Total Energy	ASTM D 3763	4.5 J (3.3 ft-lb)
Water Absorption, 24 hours	ASTM D 570	0.5%
Surface Energy		
Polar	ASTM D 5946	8 dynes/cm
Dispersive		39 dynes/cm
Total		47 dynes/cm
Taber Abrasion (average at 25 cycles)	ASTM 1044	20% haze
Thermal Properties		
Glass Transition Temperature (T_g)	DSC	119°C (247°F)
Specific Heat		
@ 60°C (140°F)	DSC	1.7 J/g-°C (0.42 Btu/lb-°F)
@ 100°C (212°F)		1.9 J/g-°C (0.46 Btu/lb-°F)
@ 150°C (302°F)		2.3 J/g-°C (0.54 Btu/lb-°F)
@ 200°C (392°F)		2.4 J/g-°C (0.58 Btu/lb-°F)
@ 250°C (482°F)		2.6 J/g-°C (0.62 Btu/lb-°F)
Coefficient of Linear Thermal Expansion	ASTM D 696	8 (x10-5/°C) (5 (x10-5/°F))
Optical Properties		
Refractive Index	ASTM D 542	1.54
Yellowness Index	ASTM D 1925	0.5
UV % Transmission at 380 nm	UV/Vis Spectro	89%
Haze	ASTM D 1003	0.8%
Gloss @ 60°	ASTM D 2457	158
Light Transmission (Total Transmittance)	ASTM D 1003	93%

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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APPENDIX D

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About this capture

21M smiles[1]. 21M lives changed.

Recently, we passed a huge smilestone: 21 million Invisalign® smiles worldwide. That's truly a mind-boggling number, and it's all thanks to you and your teams, who guide every unique patient through Invisalign treatment.

Become a provider

Clear aligners are just the tip of the iceberg.

As an Invisalign® provider, you'll quickly discover that Invisalign® treatment is so much more than just a clear aligner, it's an entire ecosystem specifically designed to help you provide the very best teeth straightening imaginable.

Align Digital Workflow

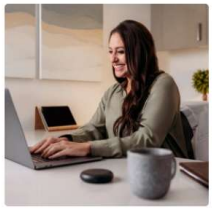
Go digital and streamline your practice's workflow from end-to-end by adopting the seamless Align Digital Workflow.

Learn more

Innovations

With exclusive technology, like SmartTrack™, SmartForce™ and SmartStage™, perhaps it's no surprise that Invisalign treatment is the most advanced clear aligner system.[3]

Learn more



Lifelong Learning

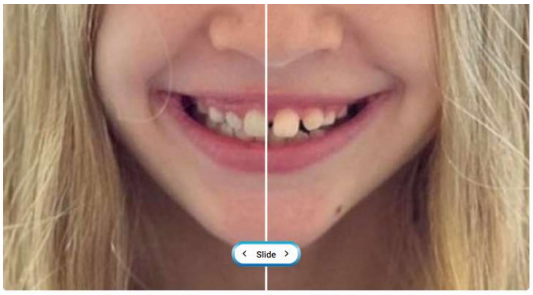
Align Education offers a wealth of content, courses and resources designed to help you continually add to your existing knowledge, so you can take your practice to the next level.

Learn more

PREDICTABLE OUTCOMES

Cutting-edge solutions developed using over 25 years of insights from over 21 million[1] patients

Countless cases. One proven solution.[8]



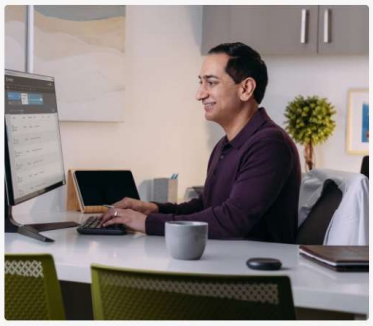
From simple tooth movement to more complex cases, Invisalign® technology can help you achieve your clinical goals with confidence. That's because Invisalign® clear aligner therapy has demonstrated success in treating multiple case types from Class I, II, and III malocclusions.

Learn more

For orthodontists

With our seamless end to end digital workflow, you can instantly streamline your practice's treatment process without sacrificing the quality of your work as an Invisalign orthodontist or patient outcomes.

Learn More



For general practitioners

Take your practice to the next level by adding an easier way to visualize, plan, and treat mild to moderate orthodontic treatments that's powered by a single digital workflow and backed by world-class support specifically designed to help general dentists.

Learn More

A solution for the whole family.

Invisalign for adults

The Invisalign® system was designed to help you do it all — from creating digital impressions to keeping transformed smiles in place.

Learn more

Invisalign for teens

Using cutting-edge technology, like Invisalign® Mandibular Advancement with Enhanced Precision Wings, you can provide innovative treatment for growing teens and tweens.

Learn More

Invisalign for kids

With Invisalign First™ clear aligners, as children grow, their smiles grow with them. That's because you can use it to correct early dental problems, including developing malocclusions in primary or permanent teeth.

Learn more

1. Data on file at Align Technology, as of September 30, 2025.
2. Based on Invisalign primary orders submitted that qualified for ClinCheck Live Plan (a successful iTero™ scan, a preferences template, and without a CBCT scan) in Jan-Jun 2025. Total orders analyzed is 230,601. Time is measured from when all materials are received for an order until the ClinCheck plan is available for doctor review. 91.17% of qualified orders were available for review in 15 minutes or less with a median time of 7 minutes. These orders represent 47.26% of total orders submitted with a preferences template. Includes Invisalign trained doctors in the NA, LATAM, EMEA, and APAC regions. Data on File at Align Technology, as of October 28, 2025.
3. Data on file at Align Technology, as of September 23, 2020.
4. Based on a global survey of 1,786 doctors (dentists and orthodontists who use clear aligners) by IQVIA in NA, EMEA, LATAM, and APAC. Data on File at Align Technology, as of June 30, 2022.
5. Data on file at Align Technology, as of September 23, 2020.
6. Study sponsored by Align Technology and based on adult Class I, nonextraction, mild to moderate crowding cases with SmartTrack material. David W. White, Katie C. Julien, Helder Jacob, Phillip M. Campbell and Peter H. Buschang, Discomfort associated with Invisalign and traditional brackets: A randomized, prospective trial. The Angle Orthodontist Nov 2017, Vol. 87, No. 6 pp. 801-808
7. Compared to Invisalign aligners previously made from single-layer (EX30) material.
8. Actual patient results shown. The before/after smiles were applied to the same face photo for visual emphasis.

Need more information on Invisalign®

Invisalign Solutions

For General Dentists

For Orthodontists

Why Invisalign

What Invisalign Treats

Align Digital Platform

Align Digital Platform

Connect

Scan

Diagnose

Plan

Treat

Monitor

Retain

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APPENDIX E

https://productcatalog.eastman.com/tds/ProdDatasheet.aspx?product=71068695&pn=eastman-tritan-fx100-copolyester
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EASTMAN

Technical Data Sheet

Eastman Tritan™ copolyester FX100

Applications

- Decorative laminates-metal
- Decorative laminates-wood
- Extruding
- Graphic arts
- Multi-layer film food contact
- Multi-layer film non food contact
- Packaging component films
- Packaging components non food contact
- Protective film
- Transaction cards

Key Attributes

- Bisphenol-A (BPA) free
- Clear, high gloss appearance
- Easy to extrude
- Excellent heat resistance
- Good scratch resistance
- Great for high temperature packaging
- Great for transaction cards and identification cards
- Not a material of concern
- Outstanding chemical resistance
- PVC alternative
- Plasticizer free
- Tremendous toughness

Product Description

Eastman Tritan™ FX100 is a copolyester resin for extruded film applications where enhanced heat resistance and toughness are required. It works great in hot fill packaging for food, transaction and identification cards, and protective laminates.

Packaging brands and film converters prefer Tritan™ FX100 for its ability to provide a clear, aesthetically pleasing package that stands up to the strenuous requirements for hot filling, while also providing safety that consumers expect. Its great for brands looking to replace materials of concern or differentiate their packaging by transitioning from opaque to clear.

Transaction and identification card producers, brands, and governments alike value Tritan FX100 for its excellent bend strength and chemical resistance, which provides longer useful life and better security. Compared to PVC and other material alternatives. Transaction cards made with Tritan™ have been found to withstand more than 10 times the number of flexural cycles using industry standard fitness for use testing protocols.

Tritan FX100 may be used in various food contact applications under the U.S. Food & Drug Administration (FDA) regulations.

This product has received a Platinum level Material Health Certificate from the Cradle to Cradle Products Innovation Institute. A Material Health Certificate is awarded to products that meet the Material Health requirements of the multi-attribute Cradle to Cradle Certified™ Product Standard. The Cradle to Cradle Products Innovation Institute is a nonprofit organization that administers the publicly available Cradle to Cradle Certified™ Product Standard, which provides designers and manufacturers with criteria and requirements for continually improving product materials and manufacturing processes. The Material Health Certificate provides manufacturers with a trusted way to communicate their efforts to identify and replace chemicals of concern in their products. For more information about Cradle to Cradle certification and to obtain printable certificates for Eastman copolyesters, visit www.c2ccertified.org. Search for Eastman Chemical Company in the Material Health Certificate Registry.

Typical Properties

Property[a]	Test Method[b]	Typical Value, Units[c]
General Properties		
Thickness of Film Tested	D 374	0.254 mm (0.010 in.)
Density	ASTM D 1505	1.19 g/cm^3
Water Vapor Transmission Rate[d]		
@ 23°C (73°F)	ASTM F 1249	4 g/m^2·24h (0.2 g/100in.^{2}·24h)
@ 38°C (100°F)		11 g/m^2·24h (1 g/100in.^{2}·24h)
Gas Permeability, CO_2	ASTM D 1434	149 cm^3·mm/m^2·24h·atm (379 cm^3·mil/100in.^{2}·24h·atm)
Gas Permeability, O_2	ASTM D 3985	32 cm^3·mm/m^2·24h·atm (82 cm^3·mil/100in.^{2}·24h·atm)
Elmendorf Tear Resistance		
M.D.	ASTM D 1922	5.1 N (524 gf)
T.D.		5.6 N (575 gf)
PPT Tear Resistance		
M.D.	ASTM D 2582	42 N (10 lbf)
T.D.		56 N (13 lbf)
Tear Propagation Resistance, Split Tear Method[e]		
M.D.	ASTM D 1938	4 N (0.8 lbf)
M.D.		13 N/mm (75 lbf/in.)
T.D.		12 N/mm (66 lbf/in.)
T.D.		3 N (0.7 lbf)
Tear Resistance, Trouser @ 200 mm/min		
M.D.	ISO 6383-1	11 N/mm (63 lbf/in.)
T.D.		11 N/mm (63 lbf/in.)
Tensile Strength @ Yield		
M.D.	ASTM D 882	41 MPa (5900 psi)
T.D.		40 MPa (5800 psi)
Tensile Strength @ Break		
M.D.	ASTM D 882	59 MPa (8500 psi)
T.D.		52 MPa (7600 psi)
Elongation @ Yield		
M.D.	ASTM D 882	7 %
T.D.		7 %
Elongation @ Break		
M.D.	ASTM D 882	179 %
T.D.		203 %
Tensile Modulus		
M.D.	ASTM D 882	1500 MPa (2.1 x 10^5 psi)
T.D.		1400 MPa (2.0 x 10^5 psi)
Dart Impact[f]		
@ 23°C (73°F)	ASTM 1709A	882 g (1.94 lb)
@ -30°C (-22°F)		913 g (2.01 lb)
Puncture Resistance (Dynatup); Total Energy	ASTM D 3763	4.6 J (3.4 ft-lb)
Water Absorption, 24 hours	ASTM D 570	0.5 %
Surface Energy		
Dispersive		39 dynes/cm
Polar	ASTM D 5946	8 dynes/cm
Total		46 dynes/cm
Taber Abrasion (average at 25 cycles)	ASTM 1044	23 % haze
Optical Properties		
Refractive Index	ASTM D 542	1.55
Yellowness Index	ASTM D 1925	0.5
UV % Transmission at 380 nm	UV/Vis Spectro	89 %
Haze	ASTM D 1003	0.7 %
Gloss @ 60°	ASTM D 2457	161
Light Transmission (Total Transmittance)	ASTM D 1003	92 %
Thermal Properties		
Glass Transition Temperature (T_g)	DSC	110 °C (229 °F)
Specific Heat		
@ 100°C (212°F)		1.9 J/g-°C (0.45 Btu/lb-°F)
@ 150°C (302°F)		2.2 J/g-°C (0.54 Btu/lb-°F)
@ 200°C (392°F)		2.4 J/g-°C (0.58 Btu/lb-°F)
@ 250°C (482°F)		2.6 J/g-°C (0.62 Btu/lb-°F)
@ 60°C (140°F)	DSC	1.7 J/g-°C (0.41 Btu/lb-°F)
Coefficient of Linear Thermal Expansion	ASTM D 696	9 (x10-5/°C) (5 (x10-5/°F))

[a] *Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*
[b] *Unless noted otherwise, the test method is ASTM.*
[c] *Units are in SI or US customary units.*
[d] *(a) Test conducted at 23°C (73.4°F) and 100% relative humidity. (b) Test conducted at 38°C (100.4°F) and 100% relative humidity.*
[e] *@ 254 mm/min (10 in./min)*
[f] *12.7 mm (1/2 in.) dia. head, 127 mm (5 in.) dia. clamp, 660 mm (26 in.) drop*

Technical Disclaimer

Eastman makes no representation and disclaims any warranty that the material in any particular shipment will conform exactly to the values given. Values as well as the performance of the final molded article may be affected by various factors such as the part design, mold design or tooling, drying, processing conditions as well as coloring or pigmentation of the product. No warranty of merchantability or fitness for use is made, and nothing herein waives any of the Seller''s conditions of sale. You must make your own determination of the suitability of this product in your specific application due to the many factors (e.g. design, processing and conditions of use) that affect the performance of the final molded article. Suitability of use should be evaluated with appropriate testing and analysis. The processing melt temperature and mold temperature refer to the actual resin melt temperature and actual mold surface temperature respectively. Consider overall resin residence time, part shot size utilization and part geometry to set appropriate processing melt temperature and mold temperature in order to minimize IV loss and maximize molded part performance.

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Eastman and its marketing affiliates shall not be responsible for the use of this information, or of any product, method, or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability of fitness of any product, and nothing herein waives any of the Seller's conditions of sale.

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APPENDIX F

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EASTMAN

Product Data Sheet

Eastman Tritan™ Copolyester FX100

Application/Uses

- Consumer and durable goods
- Graphic Arts
- Leisure and safety
- Specialty films

Key Attributes

- Does not contain Bisphenol-A (BPA)
- Does not contain plasticizers
- Excellent clarity
- Good heat resistance
- No pre-drying of film prior to thermoforming
- Outstanding chemical resistance
- Tremendous toughness
- Wide thermoforming window

Product Description

Eastman Tritan™ FX100 is an amorphous copolyester that combines excellent clarity and toughness with outstanding heat and chemical resistance. Films manufactured from this new-generation copolyester can be thermoformed without pre-drying and with a wide processing window that allows for product designs that reflect intricate detail. Eastman Tritan™ FX100 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. Eastman Tritan™ FX100 copolyester is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

Typical Properties

Property[a]	Test[b] Method	Typical Value, Units[c]
General Properties		
Thickness of Film Tested	D 374	0.254 mm (0.010 in.)
Density	ASTM D 1505	1.19 g/cm^3
Water Vapor Transmission Rate [d]		
@ 23°C (73°F)	ASTM F 1249	4 g/m^2·24h (0.2 g/100in.^{2}·24h)
@ 38°C (100°F)		11 g/m^2·24h (1 g/100in.^{2}·24h)
Gas Permeability, CO_2	ASTM D 1434	149 cm^3·mm/m^2·24h·atm (379 cm^3·mil/100in.^{2}·24h·atm)
Gas Permeability, O_2	ASTM D 3985	32 cm^3·mm/m^2·24h·atm (82 cm^3·mil/100in.^{2}·24h·atm)
Elmendorf Tear Resistance		
M.D.	ASTM D 1922	5.1 N (524 gf)
T.D.		5.6 N (575 gf)
PPT Tear Resistance		
M.D.	ASTM D 2582	42 N (10 lbf)
T.D.		56 N (13 lbf)
Tear Propagation Resistance, Split Tear Method [e]		
M.D.	ASTM D 1938	4 N (0.8 lbf)
M.D.		13 N/mm (75 lbf/in.)
T.D.		3 N (0.7 lbf)
T.D.		12 N/mm (66 lbf/in.)
Tear Resistance, Trouser @ 200 mm/min		
M.D.	ISO 6383-1	11 N/mm (63 lbf/in.)
T.D.		11 N/mm (63 lbf/in.)
Tensile Strength @ Yield		
M.D.	ASTM D 882	41 MPa (5900 psi)
T.D.		40 MPa (5800 psi)
Tensile Strength @ Break		
M.D.	ASTM D 882	59 MPa (8500 psi)
T.D.		52 MPa (7600 psi)
Elongation @ Yield		
M.D.	ASTM D 882	7%
T.D.		7%
Elongation @ Break		
M.D.	ASTM D 882	179%
T.D.		203%
Tensile Modulus		
M.D.	ASTM D 882	1500 MPa (2.1 x 10^5 psi)
T.D.		1400 MPa (2.0 x 10^5 psi)
Dart Impact [f]		
@ 23°C (73°F)	ASTM 1709A	882 g (1.94 lb)
@ -30°C (-22°F)		913 g (2.01 lb)
Puncture Resistance (Dynatup); Total Energy	ASTM D 3763	4.6 J (3.4 ft·lb)
Water Absorption, 24 hours	ASTM D 570	0.5%
Surface Energy		
Polar	ASTM D 5946	8 dynes/cm
Dispersive		39 dynes/cm
Total		46 dynes/cm
Taber Abrasion (average at 25 cycles)	ASTM 1044	23% haze
Thermal Properties		
Glass Transition Temperature (T_g)	DSC	110°C (229°F)
Specific Heat		
@ 60°C (140°F)	DSC	1.7 J/g-°C (0.41 Btu/lb-°F)
@ 100°C (212°F)		1.9 J/g-°C (0.45 Btu/lb-°F)
@ 150°C (302°F)		2.2 J/g-°C (0.54 Btu/lb-°F)
@ 200°C (392°F)		2.4 J/g-°C (0.58 Btu/lb-°F)
@ 250°C (482°F)		2.6 J/g-°C (0.62 Btu/lb-°F)
Coefficient of Linear Thermal Expansion	ASTM D 696	9 (x10-5/°C) (5 (x10-5/°F))
Optical Properties		
Refractive Index	ASTM D 542	1.55
Yellowness Index	ASTM D 1925	0.5
UV % Transmission at 380 nm	UV/Vis Spectro	89%
Haze	ASTM D 1003	0.7%
Gloss @ 60°	ASTM D 2457	161
Light Transmission (Total Transmittance)	ASTM D 1003	92%

[a] *Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*
[b] *Unless noted otherwise, the test method is ASTM.*
[c] *Units are in SI or US customary units.*
[d] *(a) Test conducted at 23°C (73.4°F) and 100% relative humidity. (b) Test conducted at 38°C (100.4°F) and 100% relative humidity.*
[e] *@ 254 mm/min (10 in./min)*
[f] *12.7 mm (1/2 in.) dia. head, 127 mm (5 in.) dia. clamp, 660 mm (26 in.) drop*

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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