

# Protect your brand with H.B. Fuller adhesive

Packaging lines are running faster and more efficiently than ever before. H.B. Fuller has responded with leading edge, trouble-free adhesive technologies that form and seal cases, cartons, and trays with better bonding using less adhesive. Our product line has the breadth and depth to handle nearly every conceivable substrate, machine, and line speed.

We continue to lead the industry with our **advantra**<sup>®</sup> technology and Clean Melt<sup>®</sup> family of high-performance, value-added packaging hot melts based on proprietary technology. Recently, we added **Liquamelt**<sup>®</sup> – an adhesive/equipment combination that combines the ease of liquid glue applications with the speed and performance of a hot melt that uses 40% renewable raw materials.

Protect your brand by using H.B. Fuller's robust line of packaging adhesives that can improve the quality, safety and efficiency of your packaging operation, and provides the best overall value.



End of Line Packaging

### Clean Melt<sup>®</sup> Hot Melt Adhesives

#### High performance packaging adhesives

**Clean Melt**<sup>®</sup> metallocene packaging hot melt adhesives deliver an optimal balance of sealing performance and cost effectiveness for typical applications. The reliable performance and patented formulations provide a well balanced cost/benefit ratio. Versatile **Clean Melt**<sup>®</sup> adhesives combine high mileage, low maintenance, and power productivity with robust adhesion to create exceptional value.

| Clean Melt <sup>®</sup> Adhesive Technology |  |  |  |  |  |
|---|--|--|--|--|--|
| Features                                    | Benefits   |  |  |  |  |
| Char-Free Technology                        | Virtually eliminates plugged nozzles due to adhesives for consistent hassle-free production. |  |  |  |  |
| Gentle on Equipment                         | Reduced equipment maintenance and parts spend.   |  |  |  |  |
| Odor-Free and Light Color                   | Enhanced package appearance and user-friendly working environment.                           |  |  |  |  |
| Clean Cutoff & Precise Application          | Performs without stringing.  |  |  |  |  |

| Product                                 | Description/Application   | Molten<br>Gardner Color | Viscosity @<br>350°F (cps) | Set<br>Speed | Open<br>Time | Application<br>Temperature |
|---|---|-------------------------|----------------------------|--------------|--------------|----------------------------|
| <b>Clean Melt</b> <sup>®</sup><br>89100 | Higher viscosity for greater green strength or high spring back flaps.  | 2                       | 2,265                      | Fast         | Short        | 340°F - 375°F              |
| <b>Clean Melt</b> ®<br>7600             | Versatile for most applications including<br>a wide variety of packages. Good for<br>ambient and freezer grade storage.                                     | 1                       | 820                        | Fast         | Short        | 325°F - 360°F              |
| <b>Clean Melt</b> ®<br>7602             | Excellent adhesion for freezer grade applications.  | 1                       | 820                        | Fast         | Medium       | 325°F - 360°F              |
| <b>Clean Melt</b> ®<br>PHC 8250         | Wide temperature performance range. This<br>is a value formulated metallocene polymer<br>based hot melt designed for packaging<br>stored at -40°F to 140°F. | 2                       | 985                        | Fast         | Short        | 325°F - 360°F              |



### End of Line Packaging

## advantra® Hot Melt Adhesives

#### Ultimate performance in packaging adhesives

**advantra**<sup>®</sup> premium metallocene hot melts are the world's leading packaging adhesive brand for applications such as case and carton sealing, straw attachment, sift-proof, bag-in-box and ream wrap. Since the introduction of the revolutionary patented **advantra**<sup>®</sup> brand of metallocene adhesives, more than 100 billion cases and cartons have been successfully sealed worldwide.

Our new **advantra Encore**<sup>™</sup> technology provides greater mileage improvements over typical metallocene products with a superior bond across a large temperature range. This new platform of adhesives is the next generation of H.B. Fuller's proprietary packaging adhesives.

| advantra <sup>®</sup> Adhesives Technology |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Features Benefits                          |  |  |  |  |  |  |
| Superior Bonding Performance               | Strong adhesion to difficult substrates such as recycled paper, PET, PE, OPP, and metalized. |  |  |  |  |  |
| Reduced Equipment Maintenance              | Reduced downtime on production lines and reduced expenses.                                   |  |  |  |  |  |
| Odor-Free and Light Color                  | Enhanced package appearance and user-friendly working environment.                           |  |  |  |  |  |

| Product                                 | Description/Application   | Molten<br>Gardner Color | Viscosity @<br>350°F (cps) | Set<br>Speed    | Open<br>Time | Application<br>Temperature |
|---|---|-------------------------|----------------------------|-----------------|--------------|----------------------------|
| advantra<br>Encore <sup>™</sup><br>4000 | Excellent bond strength across a large temperature range, increased adhesive mileage over typical metallocene products. | 3                       | 1,200                      | Medium/<br>Fast | Short        | 320°F - 375°F              |
| <b>advantra®</b><br>PHC 9250            | Excellent freezer performance and general purpose adhesive.   | 1                       | 925                        | Fast            | Short        | 320°F - 375°F              |
| <b>advantra</b> ®<br>PHC 9254           | Extremely versatile problem solver. High hot tack and wide service range enhanced adhesion to difficult substrates.     | 1                       | 1,150                      | Medium/<br>Fast | Medium       | 335°F - 375°F              |
| <b>advantra</b> ®<br>PHC 9255           | Good for straw attachment, ream wrap,<br>and difficult substrates such as OPP, PE<br>and PET.                           | 1                       | 800                        | Slow            | Long         | 315°F - 350°F              |
| <b>advantra®</b><br>PHC 9256            | High heat resistance with general purpose.<br>Versatile and excellent machining.  | 1                       | 785                        | Fast            | Short        | 320°F - 375°F              |
| <b>advantra®</b><br>PHC 9275            | Extreme hot tack and heat resistance with very high adhesion.   | 1                       | 1,020                      | Fast            | Medium       | 335°F - 375°F              |



## Low Application Temperature (LAT) Hot Melt Adhesives

Our next-generation, low-application temperature products offer the safety and reduced maintenance that you would expect, but with robust bond performance at both ends of the temperature spectrum.

| Product                             | Description/Application  | Molten<br>Gardner Color | Viscosity @<br>350°F (cps) | Set<br>Speed    | Open<br>Time     | Application<br>Temperature |
|-------------------------------------|--|-------------------------|----------------------------|-----------------|------------------|----------------------------|
| <b>advantra</b> ®<br>PHC 9200       | Surprisingly high heat resistance with great machining and precise application.  | 1                       | 1,000                      | Fast            | Short/<br>Medium | 250°F - 300°F              |
| <b>advantra®</b><br>PHC 9202        | Versatile with enhanced hot tack and adhesion to difficult substrates.   | 1                       | 1,245                      | Medium/<br>Fast | Medium           | 250°F - 300°F              |
| Clean Melt®<br>PHC 7005             | Excellent adhesion and very good heat<br>resistance. The industry's go-to-product,<br>when easy application, high performance,<br>and worker safety are desired. | 5                       | 860                        | Medium/<br>Fast | Short            | 260°F - 285°F              |
| Clean Melt®<br>PHC 7020             | Fast-setting low temp premium EVA.<br>Excellent thermal stability. Versatile<br>adhesion and good heat resistance.   | 5                       | 1,300                      | Medium          | Short            | 240°F - 260°F              |
| Clean Melt <sup>®</sup><br>PHC 7030 | Ideal for packaging which will be stored in cool temperatures.   | 5                       | 1,070                      | Medium/<br>Fast | Short            | 260°F - 290°F              |
| <b>Clean Melt</b> ®<br>PHC 7003     | Great adhesion and good performance<br>range. Ultra low application temperature<br>EVA adhesive – for those who want the<br>ultimate in worker safety.           | 8                       | 1,450<br>(@ 200°F)         | Fast            | Short            | 200°F                      |

## General Purpose EVA

These traditional formulas, supported by our experienced sourcing, R&D and technical teams, are manufactured in our world class facilities.

| Product                           | Description/Application                 | Molten<br>Gardner Color | Viscosity @<br>350°F (cps) | Set<br>Speed | Open<br>Time | Application<br>Temperature |
|-----------------------------------|---|-------------------------|----------------------------|--------------|--------------|----------------------------|
| PHC 7264                          | Versatile adhesion and high tack.       | 4                       | 1,130                      | Fast         | Short        | 325°F - 360°F              |
| Swift therm <sup>®</sup><br>84598 | General purpose and refrigerator grade. | 5                       | 800                        | Medium       | Short        | 375°F                      |
| Swift therm®<br>3H010             | General purpose.                        | 5                       | 1,215                      | Fast         | Short        | 350°F                      |
| HL 7215                           | Freezer grade with high adhesion.       | 4                       | 2,000                      | Fast         | Medium       | 330°F - 360°F              |
| Swift therm <sup>®</sup><br>2H882 | Versatile general purpose.              | 5                       | 1,250                      | Fast         | Short        | 350°F                      |

# H.B. Fuller

### End of Line Packaging

# Specialty Performance

Whether your packaging application needs to endure desert heat or a 40 below zero blast freezer, we have the adhesive to keep it together. Difficult-to-bond boxes, over-stuffed or under-filled; when it feels like a challenge, our problem-solving specialty adhesives can help.

| Product                             | Description/Application   | Molten<br>Gardner Color | Viscosity @<br>350°F (cps) | Set<br>Speed | Open<br>Time | Application<br>Temperature |
|-------------------------------------|---|-------------------------|----------------------------|--------------|--------------|----------------------------|
| EVA Hot Melts for Wax Coated Boards |   |                         |                            |              |              |                            |
| <b>Swift therm®</b><br>84521        | Good for wax coated board in the beef industry.   | 6                       | 2,125                      | Slow         | Long         | 335°F - 365°F              |
| PHC 7740                            | Excellent adhesion with light color targeted to the poultry industry.   | 2                       | 2,600                      | Slow         | Long         | 335°F - 365°F              |
| PHC 7741                            | Value performance for bonding<br>wax coated boards in beef and<br>poultry industries.   | 4                       | 3,100                      | Slow         | Long         | 335°F - 365°F              |
| EVA Hot Melts f                     | or Agriculture Case Packaging   |                         |                            |              |              |                            |
| <b>Swift therm®</b><br>84659        | Exceptional hot tack and high heat resistance.  | 7                       | 800                        | Fast         | Short        | 340°F - 370°F              |
| PHC 7007                            | High hot tack and heat resistance.  | 8                       | 1,300                      | Fast         | Short        | 325°F - 360°F              |
| <b>Swift therm®</b><br>84144        | All purpose.  | 8                       | 1,150                      | Fast         | Short        | 325°F - 360°F              |
| Miscellaneous S                     | Specialty Performance   |                         |                            |              |              | -                          |
| <b>Swift therm®</b><br>82890        | High heat resistance and hot tack.  | 6                       | 1,567                      | Fast         | Fast         | 350°F                      |
| Swift therm <sup>®</sup><br>80860   | Solvent and fragrant resistance.  | 5                       | 1,127                      | Fast         | Short        | 350°F                      |
| HM 2835Y                            | Very aggressive bonding to difficult<br>substrates. High hot tack. Excellent<br>freezer performance to -40°F.   | 4                       | 1,127                      | Medium       | Medium       | 315°F - 365°F              |
| PHC 2840                            | Freezer grade.  | 6                       | 1,000                      | Medium       | Medium       | 325°F - 350°F              |
| Smart Grip<br>PHO 3000              | Unique temporary bundling adhesive.<br>Talk to sales professional for more details.   | 2                       | 1,230                      | Medium       | Medium       | 325°F - 350°F              |
| <b>LiquaMelt®</b><br>1259           | The industry's first cool on delivery,<br>hot-on-demand adhesive system that<br>uses 40% renewable raw materials. Talk<br>to sales professional for more details. | 2                       | 10,500                     | Fast         | Medium       | 350°F - 390°F              |

# Do you know your Total Cost of Ownership? We can help you.

In addition to high performance adhesives and dispensing equipment, our comprehensive **value-added services and expertise** help ensure high productivity and low total overall costs.

### H.B. Fuller's service includes:

- Reporting & Tracking of Savings Delivered
- Rigorous Process Audits & Optimization
- Best Practices Benchmarking
- Industry Leading Training Programs
- Supply Chain & Sustainability Assessments



# Are you running the right technology?

Who knows more about packaging hot melt adhesives than the company that invented and patented the metallocene technology? H.B. Fuller's diverse portfolio of **advantra**<sup>®</sup> metallocene based adhesives; **Clean Melt**<sup>®</sup> adhesives and general purpose EVA hot melts provide your company with a complete set of adhesive choices for your packaging needs.

H.B. Fuller's experienced technical teams can help optimize your operations by helping you choose the best adhesive for your business.

We invite you to our world headquarters to see our state-of-the-art Packaging Center of Excellence which allows you to see first hand our adhesives preform on various substrates using the latest equipment in the market place. Contact your local sales professional for more information.

### Our Focus is Clear. Perfecting Adhesives.™

### For more information, visit hbfuller.com, email inquiry@hbfuller.com or call 888-HBFULLER.

IMPORTANT: It is the user's responsibility to test and determine the suitability of a product for the user's intended use. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets.





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