



Selecting the Right Adhesive for Your Application: What Material is Being Laminated

Choosing the correct adhesive for an application starts with knowing the chemistry of the material being laminated

Deanne Lewis, Product Manager, Avery Dennison Performance Tapes

This is the second in our series of articles exploring the Avery Dennison Core Series™ Portfolio, and its Product Selection Tool. The first article offered an overview of the portfolio itself—a curated selection of tape constructions that work for a large percentage of industrial applications; along with an easy-to-use tool to help converters make the right adhesive choice based on that application.

In this article, we look at the first step in our Product Selection Tool: Understanding what material an adhesive needs to be laminated to. I asked Scott Krusinski, application engineer, a few questions about why this is so important.

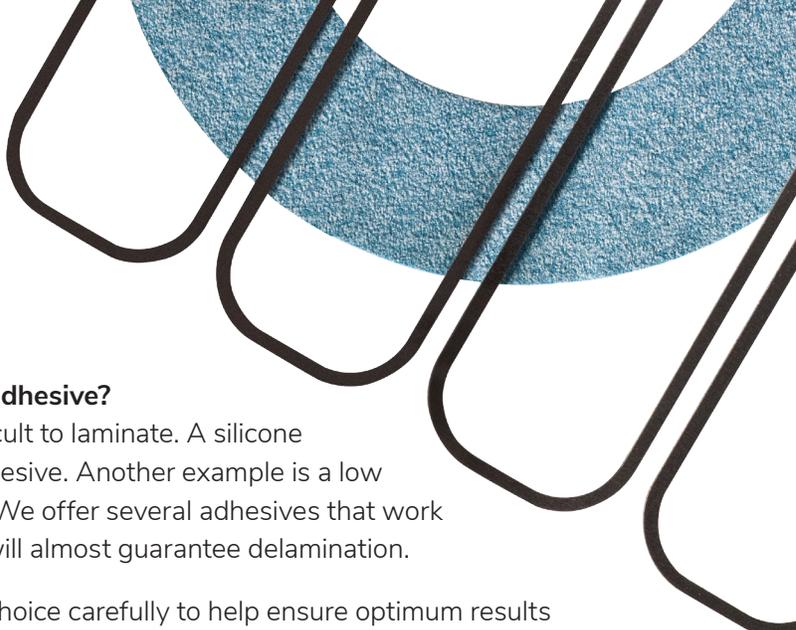
Deanne Lewis (DL): What are the most common materials tapes are laminated to?

Scott Krusinski (SK): In the Core Series, we break it down into three categories:

- Foams, including Polyether Urethane, Polyester Urethane, Dense Urethane, Sponge Rubber Foam, and Silicone Sponge Foam
- Nonwovens, felts and fabrics
- Films and foils

DL: Why is it important converters know what material they're laminating to?

SK: It's about compatibility: Specific adhesives work better with specific materials. For example, our general purpose rubber adhesive works very well with polyester urethane, dense urethane, and sponge rubber foams. On the other hand, our High Performance Acrylic (HPA™) adhesive is not suited for those foams. However, it's a great choice for felts and fabrics.



DL: Is this simply a matter of getting the optimal adhesive?

SK: It's more than that. Some materials are very difficult to laminate. A silicone sponge foam, for example, really needs a silicone adhesive. Another example is a low surface energy substrate, such as polyethylene film. We offer several adhesives that work with this surface type, but choosing the wrong one will almost guarantee delamination.

The bottom line is the converter needs to make this choice carefully to help ensure optimum results for the end use product.

DL: So when going through the process of choosing an adhesive, what specifically does the converter need to know?

SK: The converter should know the generic chemistry of the material being laminated to. A foam could be polyether urethane, polyester urethane, a denser urethane, a sponge rubber foam such as EPDM, or a silicone sponge foam. The lamination selection guide in the Core Series Product Selection Tool provides recommendations based on each of these chemistries.

DL: What if the converter has a material that is not included in the Core Series Product Selection Tool?

SK: I recommend checking the material's data sheet, which should list the generic chemistry. Sometimes these materials are given "brand names" by their manufacturer that mask the generic name. But the data sheet should list the generic name.

DL: Does Avery Dennison offer any other resources to help the converter?

SK: Yes we do. Our support network starts with our account managers. We also offer our Application Support Line (1-866-462-8379, or core.series@averydennison.com). These groups can research customer needs, leveraging our in-house expertise, and respond as quickly as possible.

The Core Series Portfolio is designed to make it easy for you to do business with Avery Dennison and your customers. A streamlined portfolio of 32 pressure-sensitive adhesive products, the offering covers a large percentage of bonding and application solutions. For more information visit, www.tapes.averydennison.com/coreseries.

Please refer to Tapes.AveryDennison.com for complete terms and conditions, including warranty terms, relating to this product. You should periodically review the site as terms and conditions are subject to change without notice.

© 2020 Avery Dennison Corporation. All rights reserved. Avery Dennison® is a registered trademark of Avery Dennison Corporation. All other Avery Dennison brands, product names, antenna designs and codes or service programs are trademarks of Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners.

ADV# 0186, 01/20, OD



Performance
Tapes

Asia Pacific
Kunshan, China,
No. 618 Nanhe Road
Kunshan Economic & Technological Zone
China 215335
Phone: +86 400 6987 555
Fax: +86 512 57155059

Europe
Tieblokkenlaan 1
B-2300 Turnhout
Belgium
Phone: +32 (0)14 40 48 11
Fax: +32 (0)14 40 48 55

North America
250 Chester Street
Painesville, Ohio
44077 USA
Phone: +1 866-462-8379
Fax: +1 888-358-4469

For more information on our bonding tapes and adhesive solutions, visit Tapes.AveryDennison.com