

Huntsman Fast-Cure Epoxy Improves Productivity at Prior Snowboard and Skis

HUNTSMAN

Enriching lives through innovation

Manufacturers of snowboards and skis, like all businesses, maintain a competitive edge through ongoing innovations in design, materials selection, and production processes. At Canada's Prior Snowboard Manufactory Ltd., Whistler, British Columbia, the challenge of handcrafting premium snow-riding products is compounded by its broad product line, including stock and custom-built snowboards, skis, and splitboards. The shape, length, side-cut, flex, weight, camber, and laminate material composition are unique to each board and ski, demanding the use of versatile laminating materials and assembly processes that perform for every design.

In support of these efforts, Prior recently began using Huntsman's Araldite® LY 3585/ Aradur® 3475 epoxy resin system to laminate its boards and skis. The epoxy system was originally tailored for the mass production of structural composite automotive parts, including the chassis for the BMW i-series of cars. The distributor of the new epoxy in Canada – Composites One, Arlington Heights, IL – introduced the Huntsman system to Prior. Sales representative Bob Andrews notes, "We recognized the tough, warm-curing epoxy's potential to streamline production of Prior's composite boards and skis."



(PHOTO CREDIT: MITCH WINTON)

Prior boarder Keaton Carlson on the slopes.

Andrews continues, "The new product has a 25 to 35 minute work life to provide the time needed to completely wet out fiberglass and/or carbon plies and to assemble the wood, top sheet, and base layers that comprise each board and ski. In addition, it cures after about two minutes at 130°C, to significantly decrease in-press processing time compared with conventional epoxy materials." The epoxy requires no postcure.

Kevin Niland, manager of finance and operations at Prior, confirms the benefits of the laminating adhesive. He notes, "The fast cure cycle increases our throughput and overall productivity. The epoxy resin system also has an easy-to-work-with viscosity (900-1,100 cPs) that provides for complete cloth wet-out, even on carbon fiber that had presented some challenges with previously used products. In addition, the Huntsman epoxy system's performance is extremely consistent, during handling and curing."

Niland adds, “The new Huntsman epoxy produces boards and skis with ultra-smooth, blemish-free surfaces and edges that are easy to finish without chipping.” Because the top sheets that Prior incorporates on many of its designs are transparent, any voids or imperfections in the laminate would be readily noticeable, creating an unacceptable product.

The most important criteria for Prior products is rigorous performance on the slopes. Araldite® LY 3585/Aradur® 3475 epoxy resin system produces boards and skis that provide a good ride on all terrains and snow types. The Prior line is also durable, to withstand exposure to cold/warm temperature extremes, vibration, and impact; the epoxy has an interlaminar shear strength of nearly 9,000 psi.



Prior fabricates boards using Huntsman Araldite® LY 3585 resin/Aradur® 3475 hardener epoxy adhesive



The Huntsman epoxy adhesive produces cosmetically attractive, blemish-free top layer surfaces that enhance graphics and other special design effects on boards and skis.

The logo for Huntsman, featuring the word "HUNTSMAN" in a bold, white, sans-serif font. The text is enclosed within a white rectangular border that has a slight 3D effect, with a thin white line above and below the text. The background of the entire top section of the page is a dark blue with a pattern of lighter blue, irregular, circular spots.

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Prior was founded in 1990 by Chris Prior, a former windsurfer who competed in events throughout the world. Prior focused on building boards to meet the unique requirements of the boutique custom high-end market. The product line quickly became popular with the industry's top riders on the North American and International circuits. Prior added skis and splitboards to its offering, winning numerous industry awards for material innovation and design. As the company continually seeks to upgrade its products, new materials like Huntsman's Araldite[®] LY 3585 /Aradur[®] 3475 epoxy system are incorporated, with the goal of improving customer satisfaction with Prior boards, skis, and splitboards.

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About Huntsman

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated chemicals with 2016 revenues of approximately \$10 billion. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets. We operate more than 100 manufacturing and R&D facilities in approximately 30 countries and employ approximately 15,000 associates within our 5 distinct business divisions including the Pigments and Additives division that we intend to spin-off as Venator Materials Corporation. For more information about Huntsman Advanced Materials, please visit the company's website at www.aralditematerials.com.