

Huntsman on track with rubber recycling

Huntsman prides itself on helping customers find new and innovative solutions that reuse and recycle materials and products. When manufacturers began re-milling scrap tires into rubber crumbs to make running tracks, garden tiles and other products, Huntsman's SUPRASEC® MDI adhesive became the raw material of choice for binding the crumbs.

"Bonding rubber granules with moisture-cured polyurethane adhesives offers many advantages including improved comfort, noise and vibration dampening, slip resistance and shock absorption," says Kevin Buck, ACE Marketing Manager, Americas. "It also supports creative design with several fade-resistant colors and patterns."

To manufacture products such as garden tiles and parking stops, the rubber granules are wetted with a prepolymer and transferred to a mold or press, where the mixture is compressed and cured. For sports and play surfaces the mixture is laid directly at the building site using a process similar to the laying of asphalt.

"Transforming old tires into state-of-the-art sports surfaces gets rid of tires that would otherwise end up in landfills collecting water and serving as mosquito breeding grounds," Buck says, noting that rubber crumbs make up 80 to 85 percent of the finished product with the MDI-based adhesive making up the majority of the remaining components.

You won't hear Huntsman's name mentioned as world-class athletes compete on the rubber crumb surfaces, which is fine with Huntsman. "We have materials that are being used in a wide array of products and applications. Our role is to be an active participant with our customers; to be at the forefront of technology to support their development needs and contribute to a more sustainable environment."