



**e.dye**® Smart H|V™



High Visibility  
Solution Dyed Polyester

Fact Sheet



Road construction projects are underway in every major city in the United States. Demands for new infrastructure, new roads to address grid-locked highways and bridges in need of repair result in construction companies working 7 days a week, 24 hours a day to finish projects.



When hi visibility workwear fades, safety is compromised. Imagine if this photo was taken at night or low-light conditions, would you still be able to spot them?

Construction workers often perform their jobs steps away from steady stream of cars, trucks and commercial vehicles. According to the US Department of Transportation, Federal Highway Administration over 20,000 workers are injured in road construction work zones. There were an estimated 96,626 crashes in work zones in 2015, an increase of 7.8% over 2014.

**e.dye<sup>®</sup>** Smart H|V<sup>™</sup>



- Superior Lightfastness
- Safer
- Brighter
- Smarter.

At risk from speeding distracted drivers, the Bureau of Labor Statistics reports from 2003-2015, 1,571 workers lost their lives at road construction sites. In 2014, there were 669 fatalities from crashes in work zones. The number of fatal work-related injuries at road construction sites averaged 121 per year.

Although Occupational Safety and Health Administration and the Federal Highway Administration require construction companies to provide workers with high visibility apparel to protect workers. Fluorescent yellow/green, orange and red fabrics are used to make workers more recognizable in daylight hours and especially at twilight when accident risks can be higher. High visibility fabrics also use reflective elements to help drivers identify workers after dark.

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# e.dye® Smart H|V™



e.dye® Waterless Color System™ is launching Smart H/V, a new approach to high visibility yarns.

Smart H/V uses a proven process known as solution dyeing. By adding the color before the polymer is extruded, the color is inside the yarn. Since the color is inside the yarn, the color is permanent. The colors won't fade or bleed.

Over time, the fluorescent properties can deteriorate from exposure to the sun's ultraviolet light, dirt, grime and repeated washings. Bright and crisp when new, high visibility garments can lose some of their effectiveness after a few months on the job.

e.dye's preliminary tests show Smart H/V yarns hold their high visibility properties longer than traditional fabric dyed yarns. Since the color is inside the yarn, the high visibility properties remain for the life of the garment.

The American workforce is filled with professions that require high visibility protection. Thousands of firefighters, airport workers, and construction workers put their faith in protective apparel.

Smart H/V offers manufacturers of high visibility a demonstrable improvement over existing products on the market. Working together, we can keep America's workers safer.



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