



# MAKE YOUR POLYSTYRENE STAND OUT

SUSTAINABLE STANDARD AND VIVID COLORS FOR POLYSTYRENE

## YOUR CHOICE OF COLORANT IS A CRITICAL DECISION

A flexible, clean and cost-effective coloring process is a key requirement for manufacturers of expanded polystyrene (EPS). But, in an age of brand differentiation and the need for clear product identification, color is another increasingly important necessity.

Holland Colours colorants for extruded and expanded polystyrene draw on our years of experience in this market. The result is Holcobatch<sup>®</sup>, a colorant that is simple to incorporate into your production process, requires no additional fixing agent during the pre-expansion process and maintains the familiar properties of your end product. It's environmentally clean and you can adjust the color intensity simply by adjusting the dosing level up to 0.5%. Holcobatch<sup>®</sup> product benefits include:

- A standard palette, plus custom colors
- No need for additional fixing agents when applied in the expansion process
- Key compound properties like insulation are unaffected
- Low dosing levels reduce coloring costs
- · Flexibility in the required color intensity

#### NEW USES FOR EPS

A cost efficient, high performing alternative to extruded foam (XPS), EPS is the perfect choice for many insulation and construction applications.

Traditionally chosen as insulation for walls, foundations and roofing, today's EPS is increasingly being recognized as a construction material in its own right. While concrete, brick, stone, wood and corrugated iron remain the most commonly used construction materials, expanded polystyrene is rapidly emerging as an alternative. Building with EPS reduces the extraction of natural materials such as wood and stone, which promot es sustainable development and is good for the environment.



EPS buildings are fast to erect, cheaper to build and have thermal characteristics suitable for areas with temperate to extreme weather conditions.

Some benefits of selecting EPS products:

- Energy efficiency
- Constant thermal resistance
- Measurable energy savings
- Strength
- Sustainability
- Prevention of bacteria growth
- No decay over time
- Dimensional stability
- Chemical inertness
- Low cost

# WHY COLOR EXPANDED POLYSTYRENE FOAM?

Color is a great way to make brands stand out, identify products and increase workplace health and safety. Today, this trend is growing in both the Building & Construction and the Packaging industries. Using a suitable polystyrene colorant, expanded polystyrene can be made any color– blue, red, green, yellow, gray and off-white are all common. You can have any color you want - as long as it's not black!

#### COLORING EXPANDED POLYSTYRENE FOR HEALTH AND SAFETY

Construction companies use a lot of expanded polystyrene foam panels (EPS foam) for building insulation. The traditional 'color' has been pure white. But in full sunshine and even bright conditions, working with white panels all day can cause temporary snow blindness. Coloring the EPS a light gray or other shade reduces this risk.

### PRODUCT OVERVIEW AND BENEFITS

#### COLORING EPS FOR DIFFERENTIATION IN BUILDING & CONSTRUCTION

Insulating Concrete Forms (ICF) is an increasingly popular construction technology in which outer walls of expanded polystyrene foam are pour-filled with concrete to create a ready-insulated concrete wall. All this happens on location, which offers savvy builders an opportunity to brand their walls during construction by coloring their EPS. Why use white EPS for a 'green' construction project? If your company's house style is yellow, or blue, or orange, why not color your EPS foam to match – and cut down glare?

Other possibilities include color coding EPS according to its intended use. In Germany, for example, expanded polystyrene foam is colored red to indicate it is suitable for use in cellars. Some companies use blue EPS foam for wet environments. Color coding can also be used to indicate the density of a particular EPS foam product.

#### MAKE NON-FOOD PRODUCT PACKAGING PART OF THE BRAND EXPERIENCE

Another great reason to color polystyrene is to add a brand experience to otherwise nondescript product packaging. Colored packaging can add an element of surprise & delight to unboxing a new TV, washing machine or other product, or it can make an ordinary polystyrene tray stand out. Although more common in food packaging, colored EPS foam can add value to non-food packaging, as well.





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All Holcobatch<sup>®</sup> colorants for EPS are suitable for use in block molding, sheet molding and transfer molding production processes. They require no additional fixing agents during the pre-expansion process and no changes in the standard processing temperature profile. Key compound end-properties such as insulation and flame retardance are unaffected when you color with Holcobatch<sup>®</sup>. In addition to offering a standard color palette, we can develop customized shades for specific needs.



#### HIGHER DOSING FOR STRONGER COLORS

Holcobatch<sup>®</sup> comes in standard and intense color ranges – the same color palette in two versions, saturated and normal. The intense colors produce stronger shades in the polystyrene beads. This is the result of using an innovative carrier system. With our standard Holcobatch<sup>®</sup> colorants for EPS, we advise a dosing level of between 0.05% and 0.5%; our intense colorants can be dosed at levels above 0.5% to increase coloring flexibility. Other product features and the processing behavior of our intense Holcobatch<sup>®</sup> olorants are the same as those for the standard Holcobatch<sup>®</sup> range for EPS.

#### SUPPORT FOR BATCH AND CONTINUOUS COLORING

Holcobatch<sup>®</sup> supports both batch process and continuous coloring. In a batch process system, polystyrene beads and Holcobatch<sup>®</sup> are mixed and fed into the pre-expander. There, hot steam (above 95°C) melts the Holcobatch<sup>®</sup> for homogenous distribution over the surface of the EPS beads. In continuous coloring, an automatic dosing unit doses the Holcobatch<sup>®</sup> into the feed stream of the unexpanded polystyrene beads.

Holcobatch<sup>®</sup> benefits:

- Dust-free thanks to encapsulated and free-flowing pigment concentrate
- · Fast-melting microbead format with average diameter of 500-750 microns
- Carrier melting point of just 85°C
- · Colors self-adhere to the surface of the EPS beads

As an employee-owned global company we create customized and effective color solutions that bring you a competitive advantage and offer you peace of mind.

#### **FIND OUT MORE**

Product availability dependent on region. For more information, a pricelist or a free sample of one of our colorants in Europe, please visit our web shop. For assistance in other regions, please contact the Sales department of our head office:

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