

PLEXIGLAS® CoolTouch™: for a Cooler Surface

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- Heat buildup of dark plastic surfaces reduced by up to 20 % thanks to heat-reflecting PLEXIGLAS® molding compound
- Reduced energy requirement for air-conditioning combined with longer service life

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Darmstadt, Germany – Dark-colored plastics moldings are particularly susceptible to heat buildup due to sunlight. In some applications, that endangers the dimensional stability of structural components, e.g. car body parts and roof modules, roofing materials, window frames and patio flooring. It also poses a problem for the indoor climate. PLEXIGLAS® CoolTouch™ was specially developed for such applications. This heat-reflecting molding compound reduces the heat buildup of dark plastic surfaces by 13–22 percent in outdoor applications.

For people and the environment

The use of PLEXIGLAS® CoolTouch™ in roofing and car roof modules has a positive influence on the indoor climate. The new heat-reflecting PMMA molding compound ensures that heat buildup in interiors is reduced. That cuts energy requirements for air-conditioning units, saves fuel in cars, reduces costs and lowers carbon emissions.

Plastic components may expand and become warped upon exposure to strong sunlight. High temperatures may cause irreversible warpage of dark PVC window frames, for instance, which can no longer be opened. This can be avoided by a coextruded protective layer of PLEXIGLAS® CoolTouch™, which prolongs the service life of the product in question.

Injection-molded components, for example, show reduced linear expansion and greater dimensional stability.

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At the same time, the high UV and weather resistance of PLEXIGLAS®, combined with its color stability, enhances the durability of components. In the long term, this cuts costs and sustainably saves resources. PLEXIGLAS® CoolTouch™ is suitable for all thermoplastic processing methods, including coextrusion. Plastics such as PVC, PC, ABS or ASA can be protected from strong heat buildup and atmospheric influences, with benefits for people and the environment alike.

Greater freedom of design

Dark patio floors or garden chairs may become scorching hot in strong sunlight. Often, designers of such items therefore have to stick to pale colors. PLEXIGLAS® CoolTouch™ offers a wider choice of color, because it makes even dark hues like black, brown, grey and green pleasant to the touch. The heat buildup of black material, for instance, is reduced by up to 13 percent – in dark brown, by over 22 percent. PLEXIGLAS® CoolTouch™ therefore offers designers greater creative scope, because it lets even dark colors keep their cool.



Caption:

Reduced surface temperature with PLEXIGLAS® CoolTouch™

The Performance Polymers Business Unit of Evonik Industries is a worldwide manufacturer of PMMA products sold under the **PLEXIGLAS®** trademark on the European, Asian, African and Australian continents and under the trademark **ACRYLITE®** in the Americas.

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Company information

Evonik Industries is the creative industrial group from Germany which operates in three business areas: Chemicals, Energy and Real Estate. Evonik is a global leader in specialty chemicals, an expert in power generation from hard coal and renewable energies, and one of the largest private residential real estate companies in Germany. Our strengths are creativity, specialization, continuous self-renewal, and reliability. Evonik is active in over 100 countries around the world. In its fiscal year 2007 about 43,000 employees generated sales of about €14.4 billion and an operating profit (EBITDA) of more than €2.2 billion.

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