NEWS RELEASE

VENATOR

FOR IMMEDIATE RELEASE
01 MAY 2017

MEDIA CONTACT:

Karen Fenwick
Direct: +44 1740 608076
Cell: +44 7795 803 192
karen_fenwick@venatorcorp.com

VENATOR LAUNCHES COOL NEW SOLAR REFLECTING ALTIRIS® PIGMENT FOR EXTERIOR PLASTIC APPLICATIONS

Unique patented technology for light colored plastics

Düsseldorf, GERMANY – Venator has launched ALTIRIS® W400 pigment – a brand new, near infrared reflecting TiO_2 pigment that can improve the thermal stability and durability of white, bright and light colored plastics used in exterior applications such as window and door profiles, sidings, decking, soffits and fascias.

ALTIRIS® W400 pigment is the most recent introduction to Venator's popular ALTIRIS® pigments portfolio, a family of products designed to deliver enhanced solar reflective properties across a broad color palette. Available for use in cool white, near-white, bright color and pastel shade plastics, the patented ALTIRIS® W400 pigment is unique in terms of its combination of large crystal size, narrow particle distribution, high crystalline purity and dense silica coating.

With a primary crystal size of 400nm, the product consists of a macro titanium dioxide (TiO_2) core, dense silica shell and alumina outer coating with an organic treatment. This larger crystal size shifts the reflectance emphasis across the solar spectrum. This ensures that a greater proportion of near infrared light is reflected when compared to a typical grade of titanium dioxide produced for pigmentary use – while also helping to maintain substantial hiding power and tinting strength.

Tests show that, compared to ordinary TiO_2, the spectra of ALTIRIS® W400 pigment can boost the solar reflectance of white and light colored plastics by as much as 25%. This in turn can enhance the thermal stability, weather resistance and durability of final products where the effects of light and heat exposure are known issues.

Light colored plastics incorporating ALTIRIS® W400 pigments will typically deliver lower heat build up temperatures than plastics made using conventional TiO_2 – a significant advantage in the exterior plastics market where every extra degree of heat protection counts. With greater heat resisting properties, plastics heat more slowly, reach lower maximum temperatures, show a smaller temperature difference through the substrate, and consequently experience lower temperature drops in the evening. Ultimately, that means less expansion and contraction, less product warp, and exterior plastic products that will last longer, particularly in hot, sunny climates.

The launch of ALTIRIS® W400 pigment comes as interest in solar reflective solutions continues to grow across the plastics industry; new legislation – designed to improve the solar reflectance of construction materials and the overall energy efficiency and longevity of buildings – is driving demand. Russell Evans, Business Development Director at Venator, explained more:

"Solar reflective pigments for exterior plastics applications have been around for some time and there has always been strong support for the concept of passive cooling. Yet until recently the technology was an optional item in the plastic formulation toolbox. That's now starting to change. For example, in some countries, new building standards are coming into force and specifiers are now actively searching for solar reflecting pigments to build into their product ranges to improve performance and durability. As decision makers seek to

maximize reductions in infrared, heat-related plastic warping, we are seeing a real need for a fully optimized reflective technology. As such, the launch of ALTIRIS® W400 pigment – a patented 400nm, dense, silica coated macro TiO_2 product that can help improve the solar reflectance of even the most reflective plastics – is incredibly timely."

ALTIRIS® W400 pigment is very easy to use. With an alumina coating and organic treatment, it is engineered to disperse quickly in plastic formulations. Used as a direct replacement for TiO_2, ALTIRIS® W400 pigment has the same processing and storage parameters.

Other products available in Venator's ALTIRIS® pigment range include ALTIRIS® 550 and ALTIRIS® 800 pigments, which are designed for use in mid and darker colored plastic surfaces, where solar heat management can have an even greater impact on long-term weatherability.

For more information about ALTIRIS® W400 pigment, or if you have a plastic project that would benefit from the use of a solar reflective pigment, please contact the Venator team.

(ends)