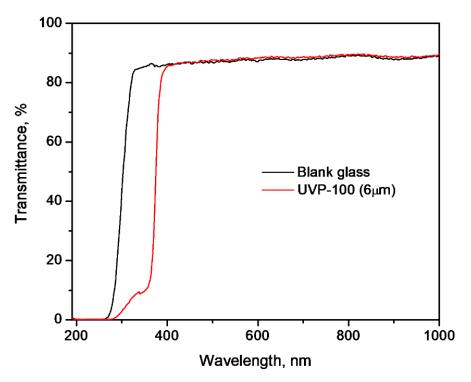


## June 30, 2021

## **NEI Corporation Introduces NANOMYTE® UVP-100: an Optically Transparent Hardcoat with UV Protection**

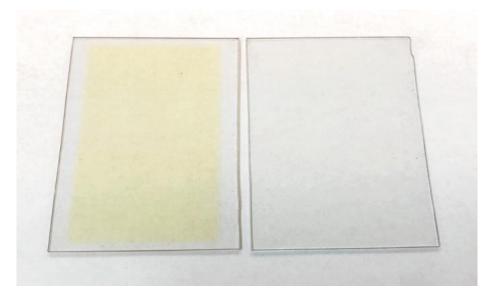
**Somerset, New Jersey (USA)** – NEI Corporation announced today that it has introduced <u>NANOMYTE® UVP-100</u>, an optically transparent coating that provides simultaneous protection from ultraviolet radiation, as well as from scratching and abrasion. A key attribute of the single layer UVP-100 coating is that it is relatively thin, only about 5 – 10 microns thick. The new coating can be used on a wide variety of polymer materials, particularly those that are susceptible to damage by ultraviolet light from the sun. NANOMYTE® UVP-100 complements NEI's portfolio of functional coatings, which include easy-to-clean, hydrophobic, anti-fog, anti-ice, and abrasion resistant coatings.

UVP-100's coating composition has a unique chemistry that's comprised of highly efficient UV-absorbing materials that are incorporated into a hard coat matrix. The figure below shows the UV-Vis spectrum of UVP-100 on glass, as compared to that of an uncoated glass control. 90% of the UV radiation with wavelength <375 nm is essentially blocked with a film approximately 6 µm thick. The coating remains fully transparent and is highly stable to UV radiation. The coating showed no damage (e.g., cracking and delamination) even after 250 hours of continuous exposure to intense UV radiation (0.9 W/m2) at 60°C in QUV accelerated weathering testing.



UV-Vis spectrum of UVP-100 vs. uncoated glass (control)





Uncoated polycarbonate plaque (left) vs. NANOMYTE® UVP-100 coated polycarbonate plaque (right) – after exposure to ultraviolet light for the same time period

The development of NANOMYTE® UVP-100 coating is based on NEI's patented <u>NANOMYTE® SR-100</u> scratch resistant coating technology, which is being used in a number of commercial applications. Using standard abrasion tests, such as ASTM D-1044 (500-gram load, CS-10F wheel, 1000 cycles), uncoated polycarbonate will generate a measured delta haze of 30 – 35%. Commercially available hard coatings on polycarbonate lead to a delta haze of 2% to 6%. By comparison, NANOMYTE® SR-100 typically generates < 1% delta haze (ASTM D1044), and UVP-100 exhibits a delta haze value under 2%. Additionally, NEI's UVP-100 coating has excellent chemical resistance, passing the 2-hour test for 0.1N HCl, 0.1N NaOH and xylene (i.e., no damage can be seen after 2 hours exposure to the above chemicals). The coating also has good solvent resistance – displaying no damage after 200 double rubs of MEK on the coating surface.

Application of UVP-100 is easy, using standard coating processes (such as immersion, flow, or spray coating) that require no specialized equipment. NEI also supplies a primer product – NANOMYTE® SR-Primer – which works well with a range of plastics to promote adhesion.

## Additional Information: <u>NANOMYTE® UVP-100 Technical Data Sheet</u> Safety Data Sheet (Part A) (Part B)

**About NEI:** NEI Corporation is an applications-driven company that utilizes materials science & chemistry to develop and produce Advanced Materials for a broad range of markets. NEI's line of <u>Protective Coatings</u> provide tailored functionalities, such as hydrophobicity, self-healing, fog resistance, self-cleaning (or easy-to-clean), scratch resistance, anticorrosion, and icephobicity.

NEI is most receptive to new applications brought to it by its customers. A typical interaction begins by applying the coating on the customer's parts and submitting it to the customer for evaluation. Either parts are coated at NEI's applications laboratory, or the customer procures a sample quantity of liquid coating for in-house application. The implementation process then moves through pilot scale tests and eventual qualification. NEI's engineers support the development and qualification efforts of its customers every step of the way, including drawing up technical specifications and engaging with third party coating applicators, if necessary.



For more information, contact: Ms. Krista Martin NEI Corporation +1 (732) 868-3141 sales@neicorporation.com ###