

News Release

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BASF's plastic additives help to improve the durability of highways in India

Hong Kong SAR, China – March 3, 2020 – BASF's light stabilizers from the Chimassorb® range have been used by M/s Megaplast India Pvt Ltd (Megaplast), a leading polyethylene products manufacturer in India, to produce nonwoven geotextile used in the construction of national highways. The additive package used plays a crucial role in stabilizing the production process and extending the service lifespan of the geotextiles.

"Nonwoven geotextiles are high-performance materials used to improve the soil for the foundations of above-ground structures. They also help protect against weather erosion damage. They therefore yield substantial benefits in civil engineering projects," said Hermann Althoff, Senior Vice President, Performance Chemicals Asia Pacific, BASF. "During the production process, our plastic additives allow longer running times, resulting in more stable processing and reduced maintenance costs, which makes them suitable for highly demanding processing conditions."

BASF not only provided Megaplast with the suitable light stabilizer package, but also helped them interpret the technical data results. During the testing period, BASF assisted the customer with the trial of various formulations, which gave them the option to choose the optimal balance between cost and performance.

In road construction, one of the most significant benefits of geotextiles is to maintain the separation between layers of different sized soil particles. The geotextile helps restrict the flow of water and finer soil particles into the gravel, which would Page 2 P137/20e

otherwise drastically reduce the strength of the gravel. Using geotextile material in road construction improves the quality of the road, increases its lifespan, and reduces the repair cost. This application is also widely used in canal lining, tunnel lining, and landfilling.

Such geotextile membranes are usually made of high-density polyethylene (HDPE). To make these, HDPE material is spun into fine filaments and then bonded by heat without using a binder. Usually, the light stabilizer package will include a process stabilizer to protect the polymer during extrusion, as well as a UV stabilizer and a thermal stabilizer to protect it from heat and light degradation.

The global demand for geomembrane materials is expected to increase dramatically over the next few years. Many of the greatest developments in this field will take place in India due to large-scale infrastructure projects that are currently in the pipeline. The World Bank has even made the use of geotextiles/geomembranes mandatory in all infrastructural projects funded by it.

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BASF is a leading supplier, manufacturer and innovation partner of plastic additives. Its comprehensive and innovative product portfolio includes stabilizers which provide ease in processing, heat and light resistance to a variety of polymers and applications including molded articles, films, fibers, sheets and extruded profiles. More information about plastic additives: www.plasticadditives.basf.com.

BASF Plastic Additives is part of BASF's Performance Chemicals division. The division's portfolio also includes Fuel and Lubricant Solutions, Kaolin Minerals, as well as Oilfield and Mining Solutions. Customers from a variety of industries including Chemical, Plastic, Consumer Goods, Energy & Resources and Automotive & Transportation benefit from our innovative solutions. To learn more, visit http://www.performancechemicals.basf.com.

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