

News Release

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BASF's light stabilizer protects playground slides from UV light

- Tinuvin® improves the strength and antistatic performance of polyethylene slides, making playground equipment safe and comfortable
- Contributes to recyclable and sustainable products

Hong Kong SAR, China – November 27, 2019 – BASF's light stabilizer Tinuvin® has been adopted by Suiko Co. Ltd., Japan, to make rotationally-molded low-density polyethylene (LDPE) slides, complete with UV stabilized and antistatic properties, for children's playgrounds.

LDPE playground slides are prone to UV degradation, which causes discoloration and deterioration of physical properties. To overcome this, Suiko added Tinuvin® to the polymer resin in the slide to provide UV stabilization and to ensure that the color of the playground slide will remain bright and colorful for years to come.

"Safety is a very important factor to consider when creating anything used by children. Playground equipment is no exception," said Hermann Althoff, BASF's Senior Vice President, Performance Chemicals Asia Pacific. "Our light stabilizers enable manufacturers of outdoor playground equipment to build with standard UV inhibitors that increase the lifespan of the product and protect it from cracks and deterioration."

Suiko's strength is in rotational molding technology, and it also has the technology for diagnosing UV degradation on the outer surface of molded products. By using

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this deterioration diagnosis technology, they can recommend an appropriate time to replace the slide and thereby increase the safety of playground equipment.

Hiroyuki Sakaki, head of R&D at Suiko, said, "Slides are usually placed outdoors and need to be resistant to weather conditions. Our big challenge was to maintain not only the physical properties of polyethylene but also the antistatic performance under such severe conditions. BASF's proposal for an accurate product selection and dosage based on their abundant UV absorbers, light stabilizers, and weathering test data enabled us to develop the antistatic slide."

Various kinds of materials are used for playground equipment. Metal slides cannot be used in summer because of high temperature. Slides made with fiber-reinforced plastics (FRP) and iron require regular repainting and it is also difficult to predict cracks on FRP products. Polyethylene slides, on the other hand, can be easily maintained and are increasingly being used owing to its recyclability as single-material plastics.

About BASF Plastic Additives

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.

About BASF

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