Eastman Solus™ performance additives for organic turf infill

Powering next-generation turf systems with sustainable infill coatings

A typical artificial grass surface consists of a carpet of green synthetic fibers held in place by a layer of sand. An additional layer of synthetic rubber granules, often called rubber crumb, tops the sand. The rubber creates an optimized playing surface.

Rubber crumb is made by grinding up end-of-life tires. The granules often contain potentially harmful chemicals that include polycyclic aromatic hydrocarbons, metals and phthalates. They may also release volatile and semivolatile organic hydrocarbons, and the granules can get washed away with rainwater and end up in the environment via footwear or clothing.

The European Commission has proposed a complete ban on synthetic rubber infill in fields. While the recent use of nondegradable, coated sand infill addresses some of the issues, residual polymer pollution can still occur.

Solus™ can overcome the issue of nondegradability. If formulated correctly, it can allow for performance infill material coatings that:

- Contain no harmful chemicals
- Do not release volatile or semivolatile organic hydrocarbons
- Meet the Fédération Internationale de Football Association (FIFA) player safety requirements
- Reduce fill-up frequency and improve field maintenance
- Enable next-generation turf systems via design and creation of circular and recyclable infill coatings