

Biodegradable Apinat for protective caps

As a result of the fruitful collaboration between Italian compounder **API** and **DLM**, a leader in hydraulics and hydropneumatics, the first protective cap for quick connect couplings in 100 % biodegradable soft material has been created. The parts offer protection from dirt, rain and possible damage to the delicate hydraulic connections of the hydraulic systems present in tractors and earth moving machinery.

The materials traditionally used for this application are PVC and SEBS-based compounds. The main characteristics required for this application are good resistance to UV and also temperature and weather resistance for lengthy and undefined periods of time. While in use, these protective caps often fall to the ground. This gave rise to **DLM's** desire to create a line of products with a low environmental impact through the design of 100 % biodegradable parts that can be completely absorbed into the ground without, in any way, harming the environment.

The challenge for **API** was to create the formulation of a 100 % biodegradable material that could offer the same technical performance of the materials traditionally used for this application while also being suitable for transformation using the machines and moulds designed for PVC and SEBS compounds. By carrying out some modifications to the rheology of the base material and by acting on the relative composition of the constituents, **API** managed to develop a special grade of **Apinat Bio** that fulfills all these requirements.

Adresse:

<http://www.gupta-verlag.com/thermoplastic-elastomers/news/technology/13214/biodegradable-apinat-for-protective-caps>