RPC Position Statement: Bioplastics

Background

The term ‘bioplastics’ describes a wide range of materials that are partially or fully biobased and/or biodegradable. A biobased plastic is derived from renewable sources such as algae, corn, or sugarcane. Biodegradable plastics are those that degrade under certain conditions into natural substances, such as carbon dioxide, methane, and water, through a chemical process. A bioplastic that is biobased may not necessarily biodegrade and a biodegradable bioplastic may not be biobased.

In 2016 the availability of bioplastics on the market was 4.2 million tonnes, this is expected to grow to 6.1 million tonnes by 2021*. Biobased, non-biodegradable materials are projected to be the main growth driver of bioplastics with the growth of biodegradable materials anticipated to increase at a slower rate. However, this still only represents around 1-2% of global plastic production, with current applications for biopolymers including packaging, catering products, consumer electronics, automotive, toys, textiles and products for the building, agricultural, and horticultural sectors.

*European Bioplastics, nova-institute (2016)

RPC’s Position

RPC will endeavour to remain up to date on emerging bioplastics and work in collaboration with customers and suppliers where such materials are deemed suitable for a product. The use of a bioplastic material will be considered where it is economically viable, available in suitable quantities and offer the same or increased performance properties for the specified product.

Recognising the increasing pressure on global food resources, it is a preference that the source of biomass for biobased polymers is not in competition or conflict with food resources. Downstream end-of-life environmental issues also need to be taken into account when working with bioplastics. Consideration, for example, should be given to how products made from or containing bioplastics will be disposed of at end-of-life so that where possible they are compatible with current recycling systems, or that conditions are in place for the correct end-of-life disposal and treatment.

Visit: www.rpc-group.com
Email: sustainability@rpc-group.com