

## **Recycled plastic**

### ***Is the expected life time affected when recycled material is used?***

For products made in recycled material there is no difference in life time expectancy, compared with the counterparts made in virgin material. Over time, recycling changes some of a material's original properties, but since the recycled material in most cases are mixed with virgin material this effect will be marginal.

### ***What is best end-of-life management for recycled materials?***

Generally speaking, recycling is the best option from a sustainability perspective. But the recycling process also needs to be efficient, meaning that a working infrastructure needs to be in place. What is best depends on local conditions.

Even if the customer cannot change the end-of-life management, the environmental benefits of changing to products made of recycled materials are still there.

## **Bioplastic**

### ***Does bioplastic provide the same life time as conventional plastics?***

Lab tests have been performed by KTH (Royal Institute of Technology) to ensure the quality of our datastrips in bioplastics. The tests also included simulated aging, by exposing profiles to warmth, humidity and light.

The overall conclusion is that during normal using conditions we expect the same life time for datastrips in bioplastics as for datastrips made of conventional plastics. We are regularly following up on our test installations to learn more on the subject.

### ***Will the bioplastic turn yellow?***

UV-light can turn many plastics yellow and brittle. We have tested the bioplastics we use in a UV-light chamber and we have detected no such changes.

### ***Will our products in bioplastic degrade in nature or on the shelf?***

Biodegradation of PLA requires conditions that are not present in the everyday environment. That means that the life time of the products made of PLA is not shortened by the fact that the material is biodegradable. But it also means that the products will not degrade quickly if left in nature.

### ***Under what conditions will our products in bioplastic degrade?***

For efficient degradation to take place the right mix of microorganisms, heat and humidity is needed. These conditions are offered at industrial composting facilities. The speed of the process varies depending on the thickness of the material. Tests have shown that our datastrips breaks down completely within 6 weeks. If a product contains tape, or other non-biodegradable parts, these parts should be removed before the product can be left for industrial composting.

Facilities for industrial composting are becoming more and more common, since the general interest in composting is increasing. However, there are still markets where industrial composting is not possible locally.