VEGETABLE PLASTIC? YES!

It is to be recycled in normal plastic, but it is more ecological!

On plastics, which focus the attention of numerous multinationals and have many interests, especially economic ones, the game is at stake and rapidly evolving.

Initially, the focus of bio-based plastics was on biodegradability or rather, compostability, i.e. the ability of the bioplastic to degrade into carbon dioxide and water. A lot of the initial work has focused on biodegradation. The main problem is that the infrastructure to exploit compostability is not yet developed. The data provided by European Bioplastics 2012 clearly shows that the bio-based / non-biodegradable trend is far from reaching biodegradation.

BIO-BASED is Bio-based Polyethylene, it is a great example of a polymer made with a renewable raw material, but bio-PE is not biodegradable. The first consideration is the source of the biomass starting materials. Bio-PE is made with cane sugar from Brazil. Sugarcane is a food source, so there is debate on whether we should use food raw materials to make bioplastics.

It is important to know that:

One hectare of land produces 82.5 tons of cane sugar, from which 7200 liters of bioethanol are obtained. From its processing, 3 tons of bio-ethylene are obtained, from which 3 tons of bio-plastic (Green-PE).

Bioethanol is produced from sugar cane through a fermentation process. The bio-ethylene monomer can then be used in traditional polyethylene polymerization processes to make various grades of PE (HDPE, LDPE, LLDPE).

According to Braskem, who is the producer, a production rate of 200 kg ton/year of bio-PE would require approximately 450 million liters of ethanol and would use 65 million hectares of Brazilian sugar cane land to produce enough sugar to enable the capacity of Braskem production. This represents 0.02% of the arable Brazilian territory. Clearly, the impact to the food supply of sugar cane is quite small.

Typical end applications of bio-PE are films (storage bags, pouches, packaging films), blown materials such as beverage containers, automotive fuel tanks, injection molded parts, pipes and other applications.

Summing up:

BIOPLASTIC is neither vegetable nor biodegradable.

It is a plastic with an identical appearance to the one already used.

Benefits:

Vegetable rather than petrochemical origin: the result is greater purity, without the risk of possibly "problematic" substances such as phenols or melamines. So more security.

Low energy and environmental impact: less energy is needed to produce it and much less carbon dioxide is emitted into the

environment. To evaluate the global environmental impact of a substance, we consider how much carbon dioxide (CO2) is released into the environment to obtain it.

Disadvantages:

The price is still high and not very competitive; but it is expected that in the future the diffusion of the product, its greater consumption and a production technique that can still be improved could bring down this price.

NATURAEQUAL'S CHOICE

Naturaequa has always been attentive to the environment with its products and the "side dish".

We started using bioplastic in the tubes of Body Creams and Body Scrubs, but we didn't stop there. Now even shower gels, shampoos, cleansers and face creams have bioplastic bottles!

The hand soaps and body oil are made from recycled plastic.

Our ecological choice is always evolving!