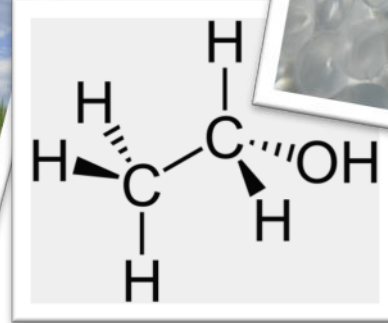


# Tube with green PE

Ets Bugnon



## What is Green PE ?

The green Polyethylen (PE), that we use, is a plant-based polymer, produced from sugarcane ethanol. It is a renewable natural resource unlike the conventional PE derived from fossil materials (petroleum-based plastic).



## At the beginning, there is sugar cane ...

- ◆ Sugar cane is grown in central Brazil, in the tropical zone, 2,000 km south of the Amazon rainforest. Thus, it does not participate in its deforestation.
- ◆ Sugar cane is one of the cleanest crops in the world, its irrigation is essentially natural and does not require the use of pesticides or GMOs.
- ◆ Sugar cane plantations represent only 1% of the cultivable area of Brazil; and those dedicated to the manufacture of bioplastics only 0.02%. Thus, our green PE has no impact on food crops.
- ◆ The harvest lasts about 8 months and the production runs 24/7. Once harvested, sugar cane is sent to crushers, the first step in sugar production.
- ◆ Cane sugar is fermented and distilled to produce ethanol.
- ◆ Ethanol can be transformed into either green plastics or biomass-fuel. Brazil has also extensively developed the manufacture of bio-ethanol as an alternative to petroleum fuels.
- ◆ Ethanol is dehydrated to create ethylene, which is polymerized in polyethylene to produce 100% plant-based plastic.

No waste in sugarcane

Sugar cane offers the possibility of using all its plant material, in particular bagasse, which is the fibrous residue, which can be used as fuel to supply electricity to boilers, electric turbines and even Brazilian cities. Molasses can also be used for pharmaceutical products.

## ... at the end, plastic tubes with green PE

- ◆ Plant-based polyethylene is then used in our tubes manufacturing processes, either as pellets for extruded tubes or as laminated film for multilayer tubes.



⇒ The green PE tube has the same characteristics as a conventional PE tube from petroleum, as well as good resistance to chemical aggression.

⇒ Like a conventional tube, the green PE tube is suitable for food contact and is recyclable according to local instructions.

The production of green PE has a negative carbon footprint. This is because sugar cane absorbs CO<sub>2</sub> for photosynthesis during its growth phase. The green PE tubes are one of our **eco-responsible solutions**. They help to reduce the consumption of petroleum-based plastic and thus participate in a more ecofriendly sustainable development approach: reduced carbon footprint, reduced greenhouse gas emissions.



Find our eco-responsible range of tubes on: [www.ets-bugnon.fr](http://www.ets-bugnon.fr)



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