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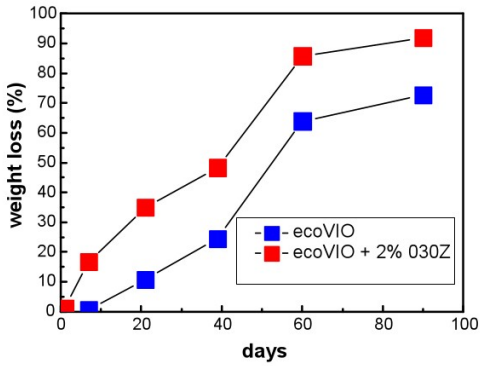
ASEPTICAE 030Zn
Biodegradation Accelerator

- ASEPTICAE 030Zn is a zinc oxide based additive with the capacity for biodegradation of biopolymers under compost conditions, which accelerates the degradation of the biopolymer to reach the required conditions in ISO 14855.
- The degradation is practically complete at 90 days under home compost conditions with 2% additive loads for biopolymers. The quality of the final compost is adequate according to EN 13432 by complying with the required conditions:
  (a) In the control of the components the absence of heavy materials is verified.
  (b) At a 6 month maximum, the biodegradability threshold meets 90%.
  (c) The disintegration process generates fragments of materials smaller than 2mm x 2mm after just 12 weeks.
  (d) The ecotoxicity of the humus is nil.
- The performance of the polymer is not altered by the additive in its life-cycle since it maintains all of the initial mechanical properties and barriers.



ECOVIO®= (PLA) + (PBAT)

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ASEPTICAE 030Zn
FAQ

- **How does the additive chemically work in the biopolymer?**
  The AS030Zn has a semiconductor structure and generates a deficit of negative electrical charges, so the polymer bonds can recombine or hydrolyze and break down rapidly. By shortening the biopolymer chains, the work of the bacteria in biodegradation is facilitated.
- **Does it work for both conventional polymers and biopolymers?**
  The additive works in both conventional polymers and biopolymers such as PLA, PBS, PBAT, PHB, etc. What happens is the bacteria will always work better in biopolymers, so the synergy with the additive increases in this case. It is not an oxofragmentable type of additive, since its purpose is such that the compost bacteria can completely transform the additive into CO2 in the shortest possible time.
- **Can it be used in products that come into contact with food?**
  The chemical additive is a micrometer-sized zinc oxide, so it is authorized as an additive for plastic that comes into contact with food according to EC 10/2011.
- **How is the product served?**
  The additive is provided in powder or masterbatch form with the biopolymer pellet always according to the customer in 25 kg bags.
- **How does it affect compostability certificates?**
  It does not affect the certificates obtained as OK COMPOST or HOME COMPOST by the customers, because it is provided in the same certified pellet and meets all requirements of the EN 13432 standard.

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