



CAPS &  
CLOSURES

# ENVIRO SHIELD

ACCELERATED BIODEGRADABLE  
PLASTIC TECHNOLOGY



# Take the first step with biodegradable plastics for a better environment.



SCAN QR CODE

Traditional plastic biodegrades slowly over thousands of years, EnviroShield™ helps speed up this process significantly. EnviroShield™ is an organic additive that causes plastic to fully biodegrade through a series of aerobic or anaerobic processes in a landfill disposal environment. Supplied as masterbatch pellets in a 1% load to the most widely used plastic resins, EnviroShield™ can be used for extruded film and sheet (blown or cast), blow moulding, injection moulded and roto-moulded products and parts. The addition of EnviroShield™ allows your product to retain its desired attributes without adversely affecting its integrity and cosmetics.

## How does EnviroShield™ work?

Plastic products made with biodegradable resin will break down in nearly all landfills or wherever else they may end up.

- Microbes available in the soil and the soil conditions increase the rate of degradation.
- Enviro-Shield products create a continuous self-sustaining process where microbes in the soil react with the additive and form "biofilms".
- Biofilms create enzymes and acids that breakdown long chain hydrocarbon molecules.
- The microbe's natural acids and enzymes take over to metabolise the material into water and methane.

## 100% biodegradable and 100% recyclable

- On land, in-land, even in water
- Home and commercial composting
- Landfills, buried in, or in contact with the soil
- Erosion / Agricultural netting and film
- Compatible with the recycle stream

## Environment friendly

- No heavy metals and is ecologically safe
- Degraded product returns to the environment not as small particles but as biomass and humus

## Featured benefits and properties

- No special storage conditions required.
- Indefinite shelf life.
- Not degraded by exposure to heat, light or external stresses during storage, shipping, handling or use.
- Does not fragment during degradation.
- Degradation begins only at the time of disposal.
- Sanitised beverage content does not activate the degradation process.
- Cost effective.

## Product performance

- No redesign required as physical properties (like Strength, Texture, Durability, Appearance, Impact resistance and safety) remains unchanged compared to the original material.
- No need for UV or anti-oxidant additives to maintain performance.
- Performance is not negatively affected by overloading.

## Fully compatible with your processing

- Can be processed with conventional equipment
- No changes to the process settings required
- 1% loading in PE, PP, PVC, PS and PET