

Product Name: OXO – BIODEGRADABLE BUBBLE FILM

1 COMPOSITION/INFORMATION ON THE COMPONENTS

Basic mix ratio

65% Polyethylene homopolymer (CAS # 009002-88-4)

20% Polyethylene high density

15% Copolymer of ethylene and octane-1 (CAS # 026221-73-8)

Special additive as a percentage of volume

2.5 ~ 3% vol Oxo - Biodegradable masterbatch

2 ECOLOGICAL INFORMATION

This product should not present a problem due to its extremely low solubility. In the soil the material will degrade via OXO-biodegradation.

OXO-biodegradation is biodegradation defined by CEN (the European Standards Organisation) {CEN/TR 1535–2006} as “degradation resulting from oxidative and cell-mediated phenomena, either simultaneously or successively.”

Oxo-biodegradable plastic, made from polymers such as polyethylene (PE), polypropylene (PP), and polystyrene (PS) containing extra ingredients (metal salts) and tested according to ASTM D6954 or BS8472 or AFNOR Accord T51-808 to degrade and biodegrade in the open environment. These salts catalyze the degradation process to speed it up so that OXO plastic will degrade abiotically as soon as the additives are added and oxygen is present, much more quickly than ordinary plastic.

The material degrades into small-chain organic chemicals, such as ketones, alcohols, carboxylic acids, and low molecular mass hydrocarbon waxes. These remaining chemicals are no longer plastic and, importantly, are biodegradable by bacteria, which are ubiquitous in the terrestrial and marine environments. The timescale for complete bio degradation at any time or place in the open environment is much shorter than for “conventional” plastics which, in normal environments, are very slow to biodegrade and cause large scale harm.

3 HAZARD IDENTIFICATION

This product is not hazardous according to EEC criteria.

4 FIRST AID MEASURES

Inhalation: Not relevant

Skin Contact: If irritation occurs wash affected area with water.

Skin contact with molten material - wash with cold water, peel off with mineral oil when cool.

Eye Contact: Irrigate immediately with water.

Ingestion: If irritation occurs seek medical advice immediately.

5 FIRE FIGHTING MEASURES

Extinguishing Media

Water; carbon dioxide; dry chemical; synthetic foam.

Protection of Fire-fighters

Wear positive-pressure, self-contained breathing apparatus.

Hazardous Combustion Products

Dense smoke emitted when burned without sufficient oxygen. The smoke may contain products of varying composition in addition to carbon dioxide and carbon monoxide.

Specific Methods of Fire-fighting

Soak thoroughly with water to prevent re-ignition.

6 ACCIDENTAL RELEASE MEASURES

Sweep/tidy up, recover if possible.

7 HANDLING & STORAGE

Store in a cool, dry place away from direct sunlight.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Good general ventilation should be sufficient for most processing operations. No specific PPE requirements. Gloves and protective clothes may be required for molten products.

9 PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Green coloured bubble formed plastic film
Colour:	Green
Odour:	None
Melting point/range:	80-120°C
Decomposition temp:	>300°C
Water solubility:	Insoluble
Vapour pressure:	Not relevant
Specific gravity:	0.90-0.97
Flash point:	>340°C
Auto-ignition temp:	>400°C
Flammability:	Not relevant

10 STABILITY & REACTIVITY

Chemical Stability

Stable under normal handling and storage conditions.

Conditions to Avoid

Avoid excessive heat and sunlight. Product will start to degrade. See decomposition temp.. Processed at high temperatures the material may generate vapour levels sufficient to cause eye and respiratory irritation.

11 TOXICOLOGICAL INFORMATION

Ingestion

Oral toxicity is generally low. May cause irritation to mouth, throat, stomach. May cause choking if swallowed.

Eye Contact

May cause irritation due to anti-static component. Mechanical injury possible.

Skin Contact

May cause irritation due to component. Mechanical injury possible.

Inhalation

Only relevant at higher temperatures which may generate vapour level sufficient to cause irritation and other effects. Slow but continuous overheating can lead to the release of low levels of formaldehyde.

12 DISPOSAL CONSIDERATIONS

Must be disposed in accordance with Statutory Guidelines and Local Authority requirements.
It is safe to include in landfill operations.

13 TRANSPORT INFORMATION

Product is not classified for any mode of transportation.

14 REGULATORY INFORMATION

This product does not require classification according to the criteria of the Commission of the European Communities.

15 OTHER INFORMATION

This product could, through its impermeability, form a physical barrier to breathing. It is important that the product is not handled by children nor is it formed into enclosures that may be abused.