

Single Use Home-Compostable Bags Plough-in Soil Enriching Agricultural Mulch Products

100% Carbon Neutral Renewable Raw Materials High Resistance to Moisture

Heat Sealable







#### **Planet Friendly Disposal**

#### **Home Compostable**

Composta Film up to 80 microns lower tensile strength lower water resistance

#### **Industrial Compostable**

from 60 microns higher tensile strength higher water resistance

## A future free from plastic......

**Composta-film BVF103** -home compost grades offer an alternative waste disposal route for organic waste bags and thin film applications, such as fruit and vegetable bags.

These materials already biodegrade completely in garden compost and have been awarded the **OK Compost HOME certificate**. Based on renewable resource raw materials, Composta-film is considered to have uncompromising quality regarding mechanical properties and moisture barrier.

Composta-film BVF102- offers resins for thin film applications which can be safely Biodegraded in industrial composting facilities. These resins are certified according to EN 13432. As a result, thin films for applications such as waste bags, T-shirt bags, mulch films and even magazine wrapping are feasible.

Biodegradable mulch film made from Composta-film BVF102 can be laid out on the field in the same way as conventional polyethylene films using the same equipment. thus, it is perfect drop-in replacement for fossil based PE. In can then be ploughed into the soil.





# **Technical Data Sheets**

- 1. Environmental Footprint
- 2. Designation of product, preparation and manufacturer
- 3. Mechanical properties
- 4. Thermal properties
- 5. Barrier properties (45 µm)
- 6. Storage & Disposal

# 2. Designation of product, preparation and manufacturer

2.1 Trade name: Composta Film

Home compostable 20 - 80 microns
Industrial compostable 20 - 100 microns

2.2 Use of product - Biodegradable and compostable film for production of plastic bag and PVC sheet eco - alternatives



#### 3. Mechanical properties

Characteristics	Typical Values	Units	ISO Reference
Tensile modulus of elasticity	390	[MPa]	ISO 527
Tensile strength	17	[MPa]	ISO 527
Tensile strain at tensile strength	> 300	[%]	ISO 527
Tensile stress at break	no break	[MPa]	ISO 527
Tensile strain at break	no break	[%]	ISO 527
Flexural modulus	370	[MPa]	ISO 178
Flexural strain at break	no break	[%]	ISO 178
Flexural stress at 3.5 % strain	9	[MPa]	ISO 178
Notched impact strength (Charpy), RT	no break	[kJ/m²]	ISO 179-1/1 eA
Impact strength (Charpy), RT	no break	[kJ/m²]	ISO 179-1/1 eU
Density	1.40	[g/cm³]	ISO 1183
Bulk density	830	[kg/m³]	ISO 60



Characteristics	Typical Values	Units	ISO Reference
Melt temperature	> 155	[°C]	ISO 3146-C
Vicat A softening temperature Heat distortion temperature HDT B	89 n/a	[*C]	ISO 306 ISO 75
Melt flow rate (190 °C/2.16 kg)	2-5	[g/10 min]	ISO 1133

### 4. Thermal properties



#### 5. Barrier properties (45 µm)

Characteristics	Typical Values	Units	ISO Reference
Water Vapour	70	[g/(m²-d)]	ISO 15 106-3
Oxygen	850	[cm²/(m²•d•bar)]	ISO 15 105-2
Nitrogen	160	[cm <sup>8</sup> /(m <sup>2</sup> *d*bar)]	DIN 53380-2





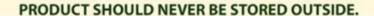
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#### 6.1 Storage conditions for BioViron Composta-film

Storage conditions

Films on rolls and finished products made from Composta-film must be stored in a dry, cool and condensation free environment. Out of direct sunlight.



We recommend to use films on rolls and products as soon as possible and not to store them for a time period of more than 12 months.

Storage time depends on processing parameters and of climate conditions in the respective area.

Because of these essential and complex interacting parameters, BioViron International cannot give any shelf life guarantees for finished goods.





#### 6.2 Disposal

Composta film is produced as both a domestic and industrial compostable material.

Domestically compostable materials can be added to food waste or buried in the soil and will composta quickly into plant food.

Industrially compostable materials need to be processed within a hot bin or industrial composting facility. Hot Bins can be purchased from a number of BioViron strategic partners.



