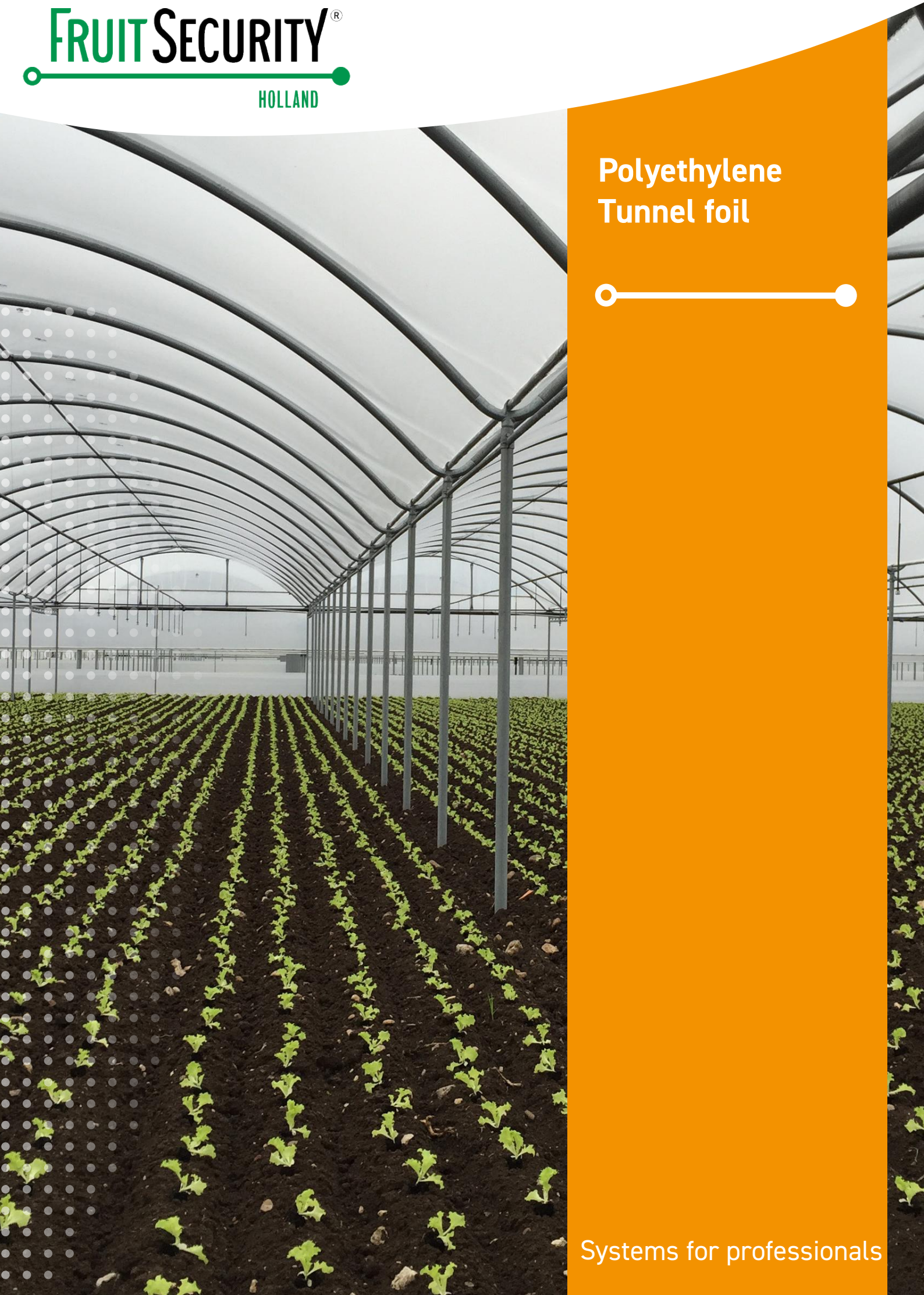
FRUIT SECURITY®
HOLLAND



Polyethylene Tunnel foil

Systems for professionals

Polyethylene foil

Tunnel foil and greenhouse foil come in all shapes and sizes, which can be found at various suppliers. For the development of the crop it is very important which type of foil you choose, because many different features can be imparted to the foil. Features that improve the quality of the foil, such as: thermicity, anti-condensation, anti-fog, anti-dust, UV-stability and light transmission.

The foil assortiment of FruitSecurity Holland contains the most qualitative and high-quality foils in the most common widths. The polyethylene foil can be used for the cultivation of soft fruits such as strawberries, blueberries, redcurrants, raspberries, etc. The strength of our polyethylene foil is that it has different features to influence the climate under the foil in the right way. This is necessary to achieve a better end result.

Light as nutrition

Just as people need nutrition, plants also need it. The quality of light is just as important as its quantity. The human eye has a peak sensitivity in the yellow-green area. Plants respond more effectively to red and blue light. Just as fat provides the most efficient calories for humans, red light provides the most efficient food for plants. Therefore, it is extremely important which film is chosen for cultivation.

Diamond 15®

FruitSecurity Holland also supplies Diamond 15® foil in addition to the standard types. The Diamond 15® foil has been developed for more intensive weather conditions. Additives are added, for example, to prevent light from shining directly onto the crops. The film then creates a unique and high light diffusion, preventing sunburn and the 'shadow' effect.

Photosynthetic efficiency is also increased with the Diamond 15® foil: light comes in from all directions through light diffusion.

Diamond 15 has the following features:

- High light transmission
- Uniform light distribution
- High thermicity
- High mechanical features

> **“Just as people need nutrition, plants do too.”**

Type numbers

E2110

Thickness 150-300 micron
Transmission 89%
Diffuse 30%
Material Polyethylene
Features Anti-fog, anti-fog, maximum par range, clear.
Used as Outer foil layer for double foil systems.

E2119

Thickness 150-200 micron
Transmission 87%
Diffuse 55%
Material Polyethylene
Features UVA, 85% thermal, anti-fog, diffuse.
Crop Strawberries, different kinds of berries, blackberries, apricots, raspberries, asparagus, etc.

E2118

Thickness 150-200 micron
Transmission 90%
Diffuse 25%
Material Polyethylene
Features Maximum PAR range, clear, anti-fog.
Used as Outer foil layer for doble foil systems.

E2553-UV OPEN

Thickness 150-200 micron
Transmission 88%
Diffuse 55%
Material polyethylene
Features EVA, 85% Thermal, Anti-Condensation, Diffuse, Anti-drop, UV-Open.
Crop Strawberries, different kinds of berries, blackberries, apricots, raspberries, asparagus, etc.

E2187

Thickness 150-200 micron
Transmission 88%
Diffuse 75%
Material Polyethylene
Features Diffuse, UVA-open.
Crop Reddish cultivation such as: strawberries, berries, peaches, apricots, etc.

Diamond 15® foil

E2143 DIAMOND 15®

Thickness 150-200 micron
Transmission 89%
Diffuse 55-60%
Material Polyethylene
Features 85% thermal, anti-fog, diffuse, anti-drip, very high light transmission.
Crop Strawberries, different kinds of berries, blackberries, apricots, raspberries, asparagus, etc.

E2567 DIAMOND 15®

Thickness 150-200 micron
Transmission 89%
Diffuse 55%
Material Polyethylene
Features Diffuse, 90% thermal, UV-open, very high light transmission.
Crop Strawberries, different kinds of berries, blackberries, apricots, raspberries, etc.

E1892 DIAMOND 15®

Thickness 150-200 micron
Transmission 89%
Diffuse 58%
Material Polyethylene
Features 85% thermal, anti-dust, diffuse, very high light transmission.
Crop Strawberries, different kinds of berries, blackberries, apricots, raspberries, asparagus,

Standard sizes

1,25m, 1,8m, 2,5m, 2,6m, 2,8m, 3,0m, 3,5m, 5,5m, 6,0m, 6,5m, 8,0m, 10,0m, 12,0m, 14,5m

Features

Light transmission

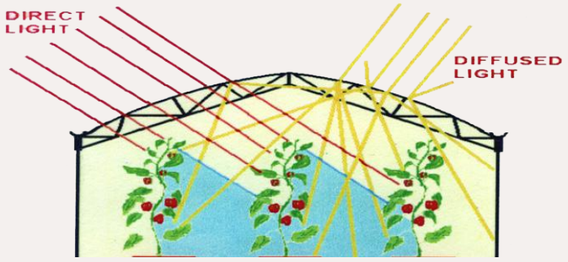
An important property of film is its light transmission.
Diffuse light reduces shadow and ensures that the plant receives a more evenly distributed light distribution throughout the day. Better light distribution allows the plant to get more light from the PAR range of the light spectrum, both for the upper leaves and the lower leaves. As a result, more photosynthesis takes place. A maximum permeability of the PAR-range is then necessary.

By using diffuse foil, the light is more evenly distributed/diffused. This will considerably reduce the risk of UV-stress and the plant will be less susceptible to diseases. Due to this light distribution, all fruits will be beautifully coloured because the light reaches the fruit from all sides.

UV stability

Crops can be damaged by excessive sunlight, resulting in crop burns. FruitSecurity Holland film therefore has a UV property that protects the crop and film against ultraviolet light.

Ultraviolet light (UV) affects polyethylene film and can even damage it. The service life of the film therefore depends on its UV resistance. To protect the film and increase the UV resistance, UV stabilisers are added during the production process.
In the UVB range of 280 nm - 320 nm, approximately 75% of the UV light is transmitted.
In the UVA range 320 nm - 400 nm, approximately 85% of UV light is transmitted.



The UV resistance of the foil depends on 4 factors:

- thickness of the foil,
- light transmission/ transparency, type of raw material,
- the use of additives such as UV stabilisers.
- These 4 factors protect the foil against UV light.

UV-open foil

A UV-open foil lets the UV radiation, which reaches the earth's surface, pass through unfiltered. This ensures better pollination of bees and bumblebees. Opening the UV range from 320nm is necessary to develop the Anthocyanin pigment (red) in bicoloured roses, nectarines and red-leaved lettuce. Anthocyanin pigment needs UV light to give colour. Anthocyanin gives the purple colour to certain types of lettuce and aubergines. A film with a UV filter causes problems with the colouring of these crops. Therefore, a UV-open film must be used. FruitSecurity Holland checks which film is most suitable for each crop.

In the UVB range of 280 nm - 320 nm, approximately 75% of the UV light is transmitted.
In the UVA range 320 nm - 400 nm, approximately 85% of UV light is transmitted.

Benefits, recommendations and tips

- **Strong foil**
- **High-quality foil**
- **Fast Shipping**
- **Proper lighting quality**
- **Long lifespan**
- **Features**
- **Eco-friendly**
- **High diffusion**

Advies nodig?
Neem contact op!

+31 (0) 318 301 731 of sales@fruitsecurityholland.com

FRUIT SECURITY®
HOLLAND

Do you want to know more?
We are happy to help!

Darwinstraat 17, 6718 XR Ede
+31 (0)318 301 731
Info@fruitsecurityholland.com
www.fruitsecurityholland.com