



# Sun Selector™ Greenhouse Covers

## Helping Your Plants to Grow Better

Sun Selector™ films are highly advanced, long-lasting multi-layer photoselective films for use in greenhouse and tunnel covering applications.

Sun Selector™ films combine high-level agronomic research with over 25 years of professional plastics know-how to provide growers world-wide with films that are both technically unique and economically viable. Multi-layer technology with selected additives, provides the right combination of strength, versatility and light transmission.

Ginegar Plastic Products is the first agri-film producer to apply new five layer co-extrusion technology in the production of Sun Selector™ greenhouse covers. This technology allows Ginegar Plastic Products to provide a full range of product features.



Ginegar  
Plastic Products Ltd.

**The wide and unique range of Sun Selector™ greenhouse covers provides optimized, cost effective selection of the right cover to suit your crop and climatic conditions.**



Product	% Light Transmission	% Light Diffusion	AD Effect	% Thermicity	AV Effect
UVA Clear	90	20			
UVA Clear/N	86	15			
UVA Diffused	86	50			
UVA AV Clear	88	20			+
UVA AV Diffused (205)	84	55			+
UVA AV Diffused/N (205N)	82	50			+
UVA Nectarine Clear	90	20			
UVA Nectarine Diffused	86	50			
UVA Super Strength Clear	88	20			
UVA White	20/30/40/60	48/38			
UVA Overwinter Clear	90	20			
UVA Overwinter White	30/40/70	38			
Dripblock Clear	90	20	+		
Dripblock Diffused	86	50	+		
Dripblock AV Clear	88	20	+		+
Dripblock AV Diffused	84	50	+		+
Dripblock Super Strength Clear	90	20	+		
AD-IR Clear	88	25	+	80	
AD-IR Diffused	85	60	+	85	
AD-IR AV Clear	88	25	+	80	+
AD-IR AV Diffused	85	60	+	85	+
AD-IR Nectarine Clear	88	25	+	80	
AD-IR Nectarine Diffused	85	60	+	85	
AD-IR 504	82	55	+	85	+
AD-IR Astrolux	72	50	+	85	+
AD-IR Astrolux Plus	75	50	+	85	+
AD-IR White	40		+	85	
AD-IR Blue	80	40	+	85	+
AD-IR Super Strength Clear	88	25	+	80	
AD-IR Super Strength Diffused (303)	85	50	+	85	
AD-IR Overwinter Clear	88	25	+	75	
AD-IR Low Tunnel	88	40	+	75	
Sun Saver 4 (EVA)	89	20	+	85	
Suntherm 4 (EVA)	90	15		82	
Suntherm Diffused	84	55		82	+
Suntherm AV Clear	85	40		82	+
Suntherm AV Diffused	84	55		82	
Suntherm Nectarine Clear	85	40		82	
Suntherm Nectarine Diffused	84	55		82	
Suntherm Super Strength Clear	85	40		82	
Suntherm Super Strength Diffused	84	50		82	
Suntherm Low Tunnel	86	50		70	

\*Average values for 150 micron (6 mil) films.

\*All the films are with anti dust additive

## Major Sun Selector™ Features

### Light Transmission

Crop plants, along with their major pests and diseases are seriously affected by the composition of light in the growing environment.

- **Sun Selector™** provides selective wavelength transmission to enhance crop performance and yield.
- **Sun Selector™** Anti-Virus improves pest and disease control for better quality crops.
- **Sun Selector™** Nectarine can improve the color of flowers, fruit and foliage.

### Light Diffusion

**Sun Selector™** light diffusion characteristics greatly improve photosynthesis efficiency by improving light dispersion.

- Especially important for self-shading, tall and trellised plants.

### Anti-Drip Effect

AD additives raise the surface tension of the film to improve light transmission and prevent dripping.

- **Sun Selector™** AD films provide a significant increase in light transmission.
- **Sun Selector™** AD films prevent water droplets from falling on plants, thus reducing the incidence of disease.

### Thermal Effect

**Sun Selector™** I.R. films prevent heat radiation losses from the Greenhouse to the atmosphere.

- **Sun Selector™** I.R. films maintain higher foliage temperatures and drier plants.
- **Sun Selector™** I.R. films reduce the incidence of frost damage.
- **Sun Selector™** I.R. films lead to saving in heating costs.

### The Anti Pest – Anti Virus Effect

Additives, which enable polyethylene to block the Entry of U.V. radiation into the greenhouse, provide Special properties to the plastic greenhouse cover.

The **Sun Selector™** Anti-Virus films provide:

- A significant reduction in the damage caused by various insect pests.
- A significant reduction in the incidence of viral diseases, transmitted to the plants by insects.
- A significant reduction in the proliferation of foliage diseases, especially Botrytis.
- A significant reduction in the use of fungicides and pesticides.
- A significant reduction of the "blackening" of the petals of Red roses.

### The Anti-Dust Effect

Reducing the accumulation of dust on the greenhouse Cover.

The advanced technology of 5-Layer extrusion, permits The inclusion of dust - reducing additive to the outside (top) layer of the film. The upper layer produced in this fashion is especially smooth reducing the accumulation of dust.

**Sun Selector™** advanced films are manufactured using highly precise and versatile multi-layer equipment, providing a wide variety of films and enabling the ongoing development of new film types to improve just about any farming application.

### Anti Mist

The anti mist additive minimizes the occurrence of fog inside the greenhouse, which is covered by anti drip films.

- The SUNSELECTOR film with Anti Mist additive helps to reduce leaf diseases such as FITOFTERA and BOTRYTIS.
- The SUNSELECTOR film with Anti Mist additive allows maximal transmittance of light radiation in the early morning hours.



## Guidelines for Handling Sun Selector™ Greenhouse cover Films.

### General

- Store Sun Selector™ Greenhouse cover Films horizontally on a smooth surface, in a protected and shaded place.
- On installation, keep a sample piece 0.5m<sup>2</sup> (2 sq.ft.) with its product identification tag.
- Avoid contact between Sun Selector™ films and non-polyethylene plastic parts and PVC adhesive tapes, that can cause accelerated degradation.
- Do not leave thermal films, in rolls or unrolled, exposed to direct sunlight as they may melt & fuse.

### Preparing the Greenhouse Structure

1. Treat slats and wooden parts with a non oil-based fumigant.
2. Make sure the structure is sturdy, especially the supports and stretching devices, and replace damaged parts.
3. Avoid the use of PVC slats, replace them with aluminum.
4. Smooth the surface of metal and wooden parts that come into contact with the films and wrap polyethylene over all sharp or protruding parts.
5. Paint all metal or wooden parts that come into contact with the film using a recommended white acrylic-based paint.

### Installing Sun Selector™ Cover Films

1. When installing multi-layer films, make sure that the film is facing the proper direction, as indicated in the instructions supplied with the film.
2. Proper installation helps keep the film intact and prevents tears. Recommended method: Place the roll on top of the gable and unroll it the length of the greenhouse. All other methods are not recommended!
3. The film should be installed during the early morning hours (cool temperature, no wind).
4. Stretch the film evenly over its entire length. Re-stretch the film after it heats up.
5. Install the roof and curtains in the same work session.

### After Installing

Important! Use white acrylic-based paint to paint 20 cm (8") wide stripes **on the film** whenever it comes into contact with the structure, along the arcs, ribs, supports, slats, etc.

### Ongoing Maintenance

1. Promptly repair any holes or tears using an adhesive tape designed for use with polyethylene films.
2. Tighten films as necessary, between seasons and especially following strong winds.
3. Shade nets that come into contact with the film can cause damage. Stretch nets between high posts above the roots.

### Using Pesticides

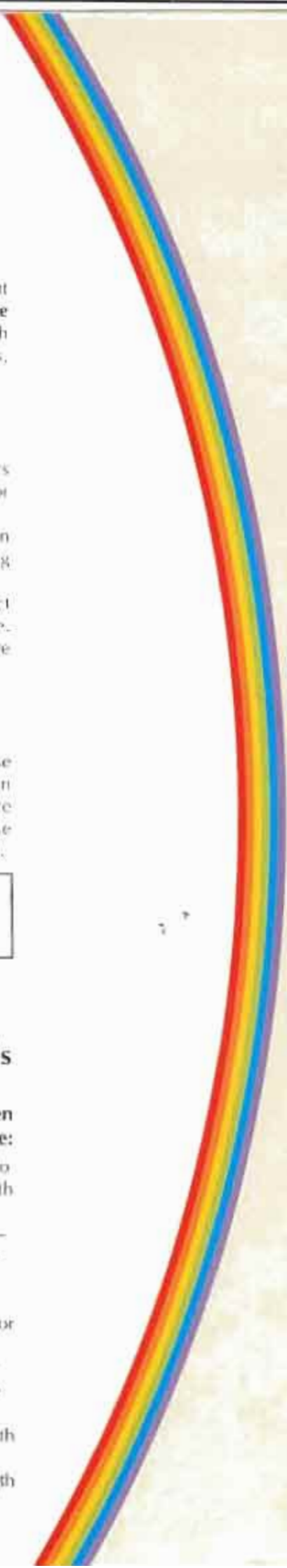
Chemical sprays, especially those containing sulfur or halogens, can damage films and lead to premature breakdown. When applying these chemicals avoid contact with the film.

The warranty on our products is valid only when the above instructions are observed.

## Fitting SunSelector™ Cover Films to Greenhouses and Tunnels

Use the following guidelines when fitting a film to a specific structure:

1. For greenhouses with spans of up to 8 meters (24') - use a film with width of the span + 1 meter (3').
2. For 8 meter (26') and wider spans - use a film with width of the span + 1.5 meter (5').
3. For tunnels - use a film with an additional width of 1.5 meters (5') for fitting into trenches.
4. The length of the film should be at least 5 (16') meters longer than the greenhouse/tunnel.
5. For curtains - calculate curtain width leaving an additional 50-70 cm (20"-28") for attachment. Film length should run the full length of the greenhouse.



“Center Fold”, primarily for greenhouse curtains. Final measurements: 2-8m. (6.5-26 ft.)



“Single W” fold, (mid-section), primarily for greenhouse coverage. Final measurements: 4-7m. (13 - 25 ft.)

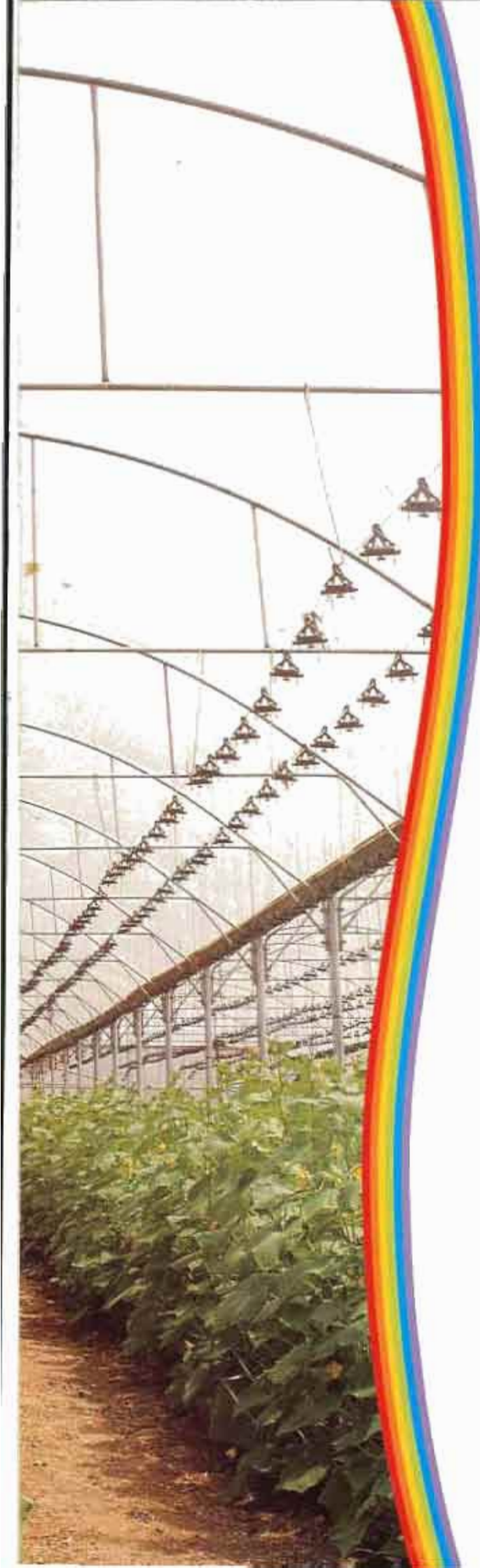


“Double W” fold, primarily for greenhouse coverage. Final measurements: 8-16m. (26 - 52 ft.)



“C” fold, primarily for greenhouse coverage. Final measurements: 8-16m. (26 - 52 ft.)





**Ginegar** **Plastics Products Ltd.** is Israel's largest developer and producer of cover films for agricultural applications. Ginegar's agricultural cover films rank among the leading cover products for greenhouses, and for soil protection and disinfection. The unique mechanical, optical and thermal characteristics of Ginegar's cover films ensure greater durability, excellent resistance to hostile weather conditions, controlled light penetration, better dust resistance and reduced pest activity. The expert agronomists of Ginegar's Research Department can provide support and solutions for all types of crops, in any climate conditions. Ginegar exports its products to 40 countries around the world.



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