



# SOLAR-ICE

**This four-year, 6 mil. film is the ideal choice as an outside layer, and the perfect partner with THERMAX™ on the inside.**

Introducing Solar-Ice from AT Films, a new-generation four-year film that will lower greenhouse temperatures in the daytime heat. Solar-Ice is the first greenhouse film that improves growing conditions by using controlled diffusion to influence the light reaching the plant.

Solar-Ice is a highly diffusing film. It's designed to make more light available to plants by increasing the amount of diffused light to close to the maximum, while reducing short wave infra-red radiation and enhancing useful light in the PAR range.

This leads to healthy, bushy plants while reducing greenhouse temperatures. What's more, there's less risk of plants scorching while achieving an optimum rate of photosynthesis. Solar-Ice creates higher yields and stronger-than-normal root systems, making it a compelling choice for ornamental plants, nursery stock and tomatoes.

Greenhouse owners have long contended with the loss of heat from greenhouses during the night and at times of cool weather. That's why Solar-Ice's high level of thermicity is so important. Research conducted in Europe shows that, in greenhouses covered with Solar-Ice, the total solar heat load was reduced by over 20%, without any significant decrease in PAR light. Your workers and customers will enjoy this more comfortable environment and you can expect this will be reflected in productivity, too.

## Compare the performance

As this table illustrates, Solar-Ice provides significant advantages compared to conventional films.

Property	Solar-Ice	Standard	White
<b>Light Transmission PAR</b>	88%	91%	68%
<b>(Diffused light &gt; 90%)</b>			
<b>Infra-red Transmission</b>	43%	86%	53%
<b>Total Solar Energy Transmission</b>	62%	87%	60%
<b>Thermicity*</b>	16%	40%	40%

*\*Note that thermicity is a measure of the amount of infra-red that passes through a film. The lower, therefore, the better.*

## Consider the benefits

- lowers greenhouse temperature by 9 degrees compared to outside (during summer heat-build season)
- produces higher-yielding plants with stronger than normal root systems
- less demand for watering
- inhibits fungus spore development
- inhibits insect propagation
- comfortable working conditions during harvest season

**Confidence in Quality.**

*AT Films Inc. endorses every foot of film with our logo and film type.*

## AT Films Inc.

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### Solar-Ice at a glance

- four-year, 6 mil greenhouse film
- high light transmission
- excellent thermic properties
- effective light diffusion

### Technical side-by-side comparison

Test	Units	Thermax	Solar-Ice	Old EVA Based Antifog
<b>Tensile MD</b>				
22% Stress	MPa	6.97	12.3	-
Max. Stress	MPa	21.5	27.2	22.4
22% Force	N	-	47.7	-
Max. Load	N	83.1	107.4	86.7
Elongation	%	905	685	570
Break Energy	J	27.0	21.9	14.9
<b>Tensile TD</b>				
22% Stress	MPa	6.6	12.1	-
Max. Stress	MPa	21.8	25.0	23.7
22% Force	N	-	46.2	-
Max. Load	N	84	96	88
Elongation	%	821	733	623
Break Energy	J	27	19.9	15.2
<b>Tear</b>				
MD	N	12.6	17.8	6.5
TD	N	17.0	>32	8.4
<b>Dart Impact</b>				
Face (F50)	g	>700	555	>700
Fold (F50)	g	>700	230	>700

### Industry-leading customer service

From advice on initial film choices and installation, right through to handling any performance concerns, AT Films Inc. provides satisfaction and peace of mind.

- Your work doesn't stop with the clock - neither does ours. Extended hours for customer service calls, so you can reach a representative after hours in case of an emergency.
- AT Films Inc. films are backed by the strongest non-prorated warranty for manufacturing defects in the industry. Product replacement warranties against defects provide peace of mind. You can concentrate on your growing business, confident that your choice of film won't expose you to extra film purchase costs in case of a problem.
- Our service looks to your future as well by creating technology to help you stay competitive. AT Films Inc. Technical Center implements continuous product monitoring, research, and development in order to continually develop better products for your needs.

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