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Effective January 2021

Commercial Solutions Division

3M™ Automotive Window Film

Crystalline Series

Product Bulletin

1. Product Description

3M™ Crystalline automotive window films are non-metallized, multilayered optical films with an acrylic pressure sensitive adhesive and an abrasion resistant coating.

2. Applications

3M™ Crystalline automotive window films are intended for interior application on flat to complex curved glazing.

3. Typical Properties

Technical information provided consists of typical product data and should not be used for specification purposes. Unless otherwise noted, all tests are performed at room temperature.

- Spectrally selective, multilayer technology
- Non-metallized, ensures no interference for mobile phones, GPS and radio signals

These are indicative values for 3M™ Window Film products.

Product construction	
Material base	Multilayer PET/PMMA
Adhesive	Pressure sensitive acrylic
Protective liner	Heat shrinkable, siliconized PET

Typical Performance Properties according to EN 410

Film Type	Visible Light			Total Solar Energy Rejected	Infrared Rejection*	Infrared Energy Rejection**	UV Block	Glare Reduction
	Reflected (interior)	Reflected (exterior)	Transmission					
	%	%	%	%		%	%	%
Clear glass (6 mm)	8	9	89	19	NA	NA	34	NA
Crystalline 20	5	6	21	63	99	67	99.9	76
Crystalline 40	7	7	39	60	99	71	99.9	55
Crystalline 70	9	9	69	50	97	69	99.9	22
Crystalline 90	10	10	86	34	95	48	99.9	3
Auto glass 75 (6 mm)	7	7	73	42	NA	NA	67	NA
Crystalline 20	5	5	17	64	99	66	99.9	77
Crystalline 40	6	6	33	62	99	69	99.9	55
Crystalline 70	7	8	58	55	97	68	99.9	21
Crystalline 90	8	9	72	46	95	59	99.9	1

* IRR - IR Rejected over 900 – 1,000 nm. Film with liner measurement.

** IRER – The percent of solar infrared energy rejection over the wavelength range from 780 – 2,500 nm. IRER takes into account the transmitted and absorbed IR energy that will be reradiated into a car. Film is applied to glass.

The values above are the results of illustrative lab test measurements and shall not be considered as a commitment from 3M.

4. User Information

4.1 Shelf Life & Storage (prior to application)

Shelf life is 5 years from the manufacturing date. Material should be stored in its original packaging, laying in a horizontal orientation, away from direct sunlight. Heavy objects should not be placed on top of it to avoid damaging the product. Recommended storage conditions are +21°C and 40 – 50% relative humidity. Avoid extreme temperature ranges in storage.

The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.

4.2 Application

These are indicative values for 3M™ Window Film products.

Recommended surface	Flat to complex curved glazing
Application method	Wet application. Use a heat gun to shrink and fit the film to simple and complex curves when necessary.
Application temperature	From +4°C to +45°C
Service temperature	From -40°C to +70°C (not for extended periods of time at the extremes)
Edge sealing	Not necessary
Drying Time	Final adhesion is reached after approximately 15 - 20 days at +18°C and dry conditions. Please refer to local instructions for details.

3M Automotive Window Film is to be professionally applied by skilled, well-trained and 3M authorized installers. Windows can be considered operational after 24 hours.

4.3 Maintenance and Cleaning

Use a cleaning agent designed for high quality glass surfaces. The cleaning agent must be wet and non-abrasive with a pH value between 6 and 8 (neither strongly acidic nor strongly alkaline).

5. Remarks

This bulletin provides technical information only.
To request additional product information see address below.

Important Notice

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.
Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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