### **Product Benefits**

- Metal-free design with no electronic interference
- 3M patented Infuse Technology provides better durability, color retention and fade resistance
- · Much less reflectivity than traditional window films
- Good heat rejection capability
- Up to 99+% UV protection

## **Product Performance & Technical Data**

	Ë	VLT	Visible Reflection Exterior	Visible Reflection Interior	UV Block	TSER	Glare Reduction
6mm Clear*	OBS 5 4 mil	7%	4%	5%	99.9%	45%	92%
	OBS 15 4 mil	19%	5%	5%	99.8%	41%	79%
	OBS 35 4 mil	46%	6%	6%	99.6%	33%	48%
	OBS 50 4 mil	62%	7%	7%	99.5%	28%	30%
	OBS Clear 4 mil	87%	9%	9%	99.4%	21%	2%

6mm Auto75**	OBS 5 4 mil	6%	5%	4%	99.9%	60%	92%
	OBS 15 4 mil	16%	5%	5%	99.9%	57%	79%
	OBS 35 4 mil	38%	6%	5%	99.8%	52%	50%
	OBS 50 4 mil	51%	6%	6%	99.8%	48%	32%
	OBS Clear 4 mil	72%	7%	7%	99.8%	43%	4%

Description	Impact Strength (ft-lbs)***			
Tempered Glass (1/4"; 6mm)	5			
OBS Series on Tempered Glass	30-35			

Film Direction	Thickness (mils)	Tensile Strength (psi)	Break Strength (pli)	Elongation at Break (%)	Modulus (Kpsi)
TD	4.5 - 5.5	27,000 - 36,000	143 - 148	54% - 80%	628 - 739
MD	4.5 - 5.5	24,000 - 27,000	106 - 137	105% - 119%	563 - 633

Film Direction	Thickness (um)	Tensile Strength (MPa)	Break Strength (N/cm)	Elongation at Break (%)	Modulus (MPa)
TD	114 - 140	186 - 248	250 - 259	54% - 80%	4.3 - 5.1
MD	114 - 140	165 - 186	186 - 239	105% - 119%	3.9 - 4.4

<sup>\*</sup> Data is comparable to current auto industry method using a clear 89% VLT glass, and testing is in accordance to ANSI/NFRC 200 Procedure.



<sup>\*\*</sup> Data should be used as a reference tool for worst case scenario of net VLT on automotive clear glass of 73% VLT.

<sup>\*\*\*</sup> Modified ANSI Z26.1, 5.12 Ball Drop Impact Strength (2249.8 g, 8.17 cm diameter steel ball).

4 mil Obsidian Security Series

# **Health and Safety**

When handling any chemical products, read the manufacturers' container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to <u>3M.com/SDS</u>, or by mail or in case of an emergency, call 1-888-364-3577 or 1-651-737-6501. When using any equipment, always follow the manufacturers' instructions for safe operation.

## **Technical Information**

Technical information and data, recommendations, and other statements provided by 3M are based on information, tests, or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed. Such technical information and data are intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. The typical values shown should not be used for the purpose of specification limits. If you have questions about this Product, contact the Customer Service Department at 1-800-852-9722.

# **Product Use**

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

# Warranty

3M and the Authorized Automotive Window Film Dealer (collectively referred to as "Seller" herein) warrant that as long as you own your vehicle, 3M™ Automotive Window Film Obsidian Series will:

- 1. Maintain Solar Reflective properties without cracking or crazing.
- 2. Maintain Adhesion without blistering, bubbling or delaminating from the glass.
- 3. Maintain film color.

The 3M logo on the film may fade/wear off over time. This is consistent with standard product performance and is not covered under the product warranty.

3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MER- CHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## **Limited Remedy**

If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

### No Extension of Warranty

In the case of an approved warranty claim, the replacement Product will carry only the remaining term of the original warranty period.

### **Limitation of Liability**

Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.



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