## **Product Benefits**

- Good heat rejection capability
- 3M patented infused technology provides better durability, color retention and fade resistance
- Metal-free design with no electronic interference\*\*\*
- Low visible light reflectivity value
- Up to 99.9% UV protection

## Product Performance & Technical Data

| Toddet Terrormance & Teenmed Bata |               |                                |  |  |          |                                |                 |                          |                                  |  |  |
|-----------------------------------|---------------|--------------------------------|--|--|----------|--------------------------------|-----------------|--------------------------|----------------------------------|--|--|
| Auto 75*                          | Film          | Visible Light<br>Transmittance | Visible Light<br>Reflectance<br>Exterior | Visible Light<br>Reflectance<br>Interior | UV Block | Total Solar<br>Energy Rejected | Glare Reduction | Infrared<br>Rejection*** | Infrared Energy<br>Rejection**** |  |  |
|                                   | Auto 75 Glass | 73%                            | 7%                                       | 7%                                       | 67%      | 42%                            | NA              | NA                       | NA                               |  |  |
|                                   | Obsidian 5    | 5%                             | 4%                                       | 3%                                       | 99.8%    | 60%                            | 93%             | 8%                       | 53%                              |  |  |
|                                   | Obsidian 15   | 16%                            | 5%                                       | 5%                                       | 99.9%    | 57%                            | 79%             | 9%                       | 53%                              |  |  |
|                                   | Obsidian 25   | 22%                            | 5%                                       | 5%                                       | 99.8%    | 55%                            | 70%             | 9%                       | 53%                              |  |  |
|                                   | Obsidian 30   | 32%                            | 5%                                       | 5%                                       | 99.6%    | 53%                            | 56%             | 9%                       | 53%                              |  |  |
|                                   | Obsidian 35   | 37%                            | 5%                                       | 5%                                       | 99.6%    | 52%                            | 49%             | 9%                       | 53%                              |  |  |
|                                   | Obsidian 40   | 44%                            | 6%                                       | 6%                                       | 99.5%    | 50%                            | 39%             | 7%                       | 53%                              |  |  |
|                                   | Obsidian 50   | 51%                            | 6%                                       | 6%                                       | 99.5%    | 48%                            | 30%             | 9%                       | 53%                              |  |  |
|                                   | Obsidian 70   | 64%                            | 7%                                       | 7%                                       | 99.7%    | 45%                            | 15%             | 7%                       | 53%                              |  |  |

| 6mm Clear** | Film        | Visible Light<br>Transmittance | Visible Light<br>Reflectance<br>Exterior | Visible Light<br>Reflectance<br>Interior | UV Block | Total Solar<br>Energy Rejected | Glare Reduction | Infrared<br>Rejection**** | Infrared Energy<br>Rejection**** |
|-------------|-------------|--------------------------------|--|--|----------|--------------------------------|-----------------|---------------------------|----------------------------------|
|             | Clear Glass | 89%                            | 9%                                       | 8%                                       | 34%      | 19%                            | NA              | NA                        | NA                               |
|             | Obsidian 5  | 6%                             | 4%                                       | 3%                                       | 99.6%    | 44%                            | 93%             | 8%                        | 24%                              |
|             | Obsidian 15 | 19%                            | 5%                                       | 5%                                       | 99.7%    | 40%                            | 79%             | 9%                        | 23%                              |
|             | Obsidian 25 | 27%                            | 6%                                       | 5%                                       | 99.6%    | 38%                            | 69%             | 9%                        | 24%                              |
|             | Obsidian 30 | 39%                            | 6%                                       | 5%                                       | 99.0%    | 35%                            | 56%             | 9%                        | 23%                              |
|             | Obsidian 35 | 45%                            | 6%                                       | 6%                                       | 99.0%    | 33%                            | 49%             | 9%                        | 23%                              |
|             | Obsidian 40 | 54%                            | 7%                                       | 6%                                       | 98.9%    | 31%                            | 39%             | 7%                        | 23%                              |
|             | Obsidian 50 | 62%                            | 7%                                       | 7%                                       | 98.9%    | 28%                            | 30%             | 9%                        | 23%                              |
|             | Obsidian 70 | 78%                            | 8%                                       | 8%                                       | 99.3%    | 23%                            | 12%             | 7%                        | 23%                              |

<sup>\*</sup> Data should be used as a reference tool for net VLT on ¼" (6mm) thick, automotive green glass of 73% VLT, and testing is in accordance to ANSI/NFRC 200 Procedure.

## Commercial Solutions Division

3M Center, Building 220-12E-04 St. Paul, MN 55144 3M.com/windowfilm

© 3M 2020. All rights reserved.

3M is a trademark of 3M. Used under license in Canada.

All other trademarks are property of their respective owners. Revision A, August 2020. Please recycle.



<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>Will not interfere with cell phones, GPS systems or satellite radio.

<sup>\*\*\*\*</sup>IRR - IR Rejected over 900 - 1,000 nm. Film with liner measurement

<sup>\*\*\*\*\*</sup>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

PERFORMA

### **AIS**

View the Article Information Sheet (AIS), document # 38-7652-1, for 3M Obsidian Series at 3M.com/SDS.

# **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 1-866-499-8857.

### **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 warrants that each 3M product will be free from defects in material and manufacture for the length of the product warranty. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY 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.



3M Center, Building 220-12E-04 St. Paul, MN 55144 3M.com/windowfilm

© 3M 2020. All rights reserved.
3M is a trademark of 3M. Used under license in Canada.
All other trademarks are property of their respective owners. Revision A, August 2020. Please recycle.

