

Ultra-Diffusive Light-Absorbing Foil

UV, VIS and IR

Metal Velvet™ Scatter Black™

"It's definitely the blackest thing I ever saw" ELAS, NV

Metal Velvet™

光吸収膜メタルベルベットタイプは、紫外、可視、赤外光において、弊社光吸収膜シリーズで最も反射率が低い光吸収膜タイプです。グレーディング角への対応が必要な場合、スカッターブラックが最適な光吸収膜となります。メタルベルベットは貼付型シートとしての供給となります。

Metal Velvet™ - 特徴

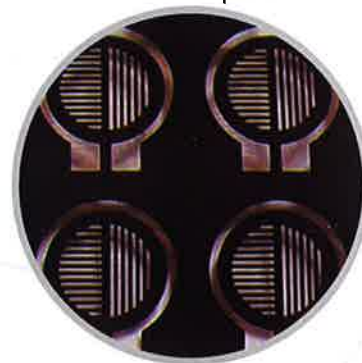
- 吸収率 99.99 %
- 紫外、可視、赤外対応

主なアプリケーション

- 迷光、散乱光の除去、吸収
- 受動的な熱管理
- 光学システム内部全般
- レーザーデバイス関連



Laser cut part



Removable surface protection film

Black coated aluminium foil

Adhesive

Release liner



Technical data*

Optical Performance																							
Specular Reflectance	<table border="1"> <caption>Specular Reflectance Data</caption> <thead> <tr> <th>Wavelength [μm]</th> <th>Reflectance (%)</th> </tr> </thead> <tbody> <tr><td>0</td><td>0.0</td></tr> <tr><td>2</td><td>0.1</td></tr> <tr><td>4</td><td>0.2</td></tr> <tr><td>6</td><td>0.3</td></tr> <tr><td>8</td><td>0.4</td></tr> <tr><td>10</td><td>0.5</td></tr> <tr><td>12</td><td>1.0</td></tr> <tr><td>14</td><td>2.0</td></tr> </tbody> </table>	Wavelength [μm]	Reflectance (%)	0	0.0	2	0.1	4	0.2	6	0.3	8	0.4	10	0.5	12	1.0	14	2.0				
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Specification																							
Working Temperatures																							
without adhesive	Long term -269 °C to +350 °C, short term up to +400 °C																						
with standard adhesive	Long term -40 °C to +121 °C, short term up to +177 °C																						
with hi-temp adhesive	Long term -40 °C to +180 °C, short term +300 °C																						
Coating Chemical Content	completely inorganic																						
Humidity Resistance	MIL-C- 48497A																						
Abrasion Resistance	very light, should not be rubbed or scratched																						
Coating Thickness	5 μm - 7 μm																						
Foil Substrate																							
material	Aluminum foil																						
width	up to 300 mm																						
thickness	110 μm																						
Optional Adhesive Layer																							
thickness	as per requirement - typically 25-60 μm																						
storage and shelf life	<ul style="list-style-type: none"> - storage conditions – room temp (approx 21°C); 50% RH - standard shelf life – 6 months from shipment by Acktar - extended shelf life – available - inquire 																						
Delivery Form	standard-sheets, coils available on request																						

* The data should be considered typical/representative only

Limited Warranty: For a period of 6 months from the date of first sale, Acktar warrants this product(s) to be free from defects in manufacturing. Our obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse or inability to use this product(s). ACKTAR disclaims any and all other warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose.