

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™

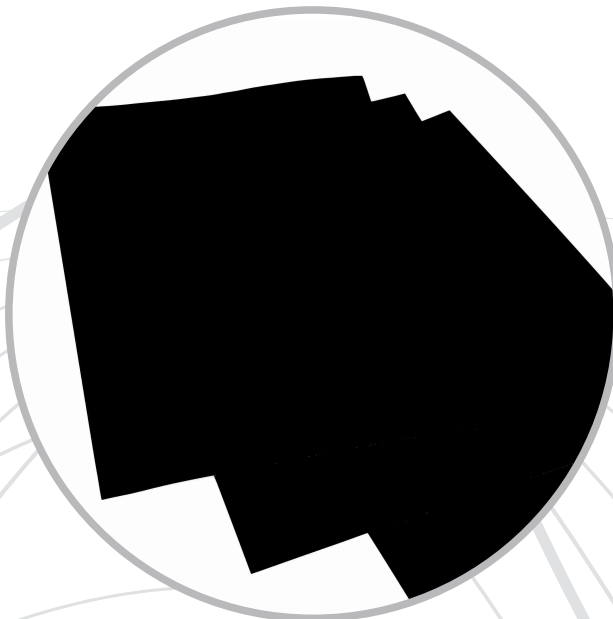
光吸収膜メタルベルベットタイプは、紫外、可視、赤外光において、弊社光吸収膜シリーズで最も反射率が低い光吸収膜タイプです。グレーディング角への対応が必要な場合、スキャッターブラックが最適な光吸収膜となります。メタルベルベットは貼付型シートとしての供給となります。

Metal Velvet™ - 特徴

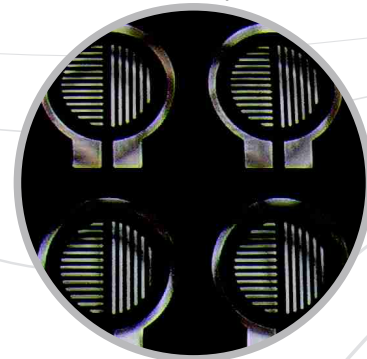
- 吸収率 99.99 %
- 紫外、可視、赤外対応

主なアプリケーション

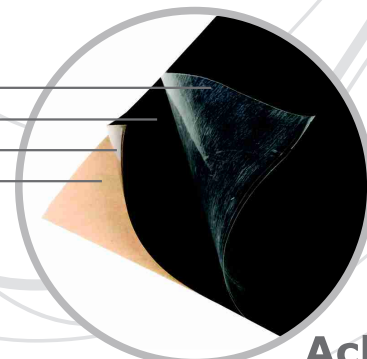
- 迷光、散乱光の除去、吸収
- 受動的な熱管理
- 光学システム内部全般
- レーザーデバイス関連



Laser cut part



Removable surface protection film
Black coated aluminium foil
Adhesive
Release liner



Other Acktar coated foils

- Vacuum Black™ for UV and VIS
- Fractal Black™ for UV, VIS, and IR

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						
Wavelength [μm]	Reflectance [%]																								
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without adhesive	Long term -269 °C to +350°C, short term up to +400 °C																								
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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																								
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thickness	as per requirement - typically 25-60 μm																								
storage and shelf life	- 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.

Acktar VIS and IR Light Absorbing Foil

Spectral Black™ and Spectral Black HP™

Spectral Black™ - 可視、近赤外、中赤外、遠赤外に対応した光吸収膜で、迷光・散乱光除去や輻射熱吸収など様々な用途に適しています。

貼付型シート:

- 対象部品が、曲面、球面、複雑形状の場合、予備成形タイプ(プリフォームシート)の提供も可能です。
- 強い耐湿性が求められる場合、耐湿型光吸収膜の提供が可能です。
- 対象面積が広域な場合にも適しています。
- 光吸収膜の定期交換が必要な場合に適しています。

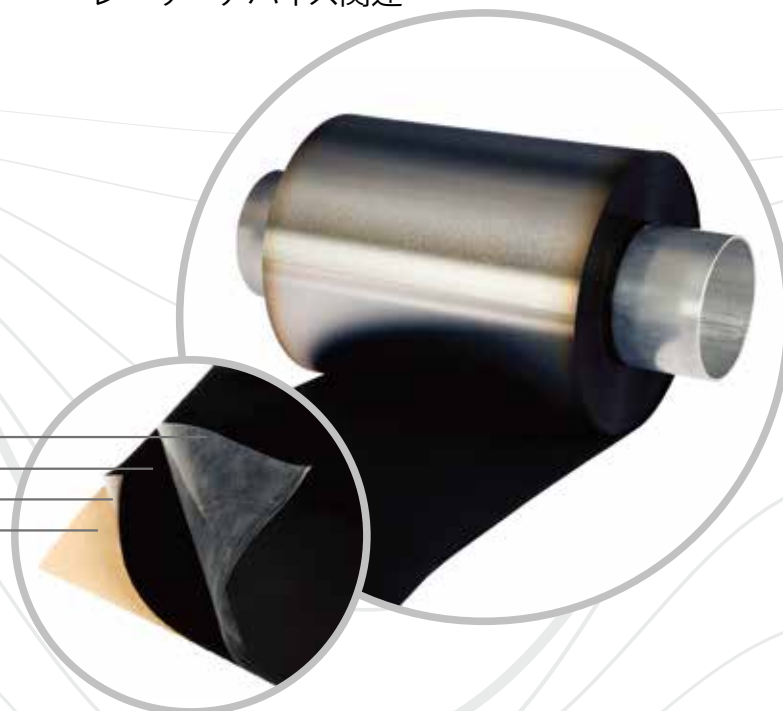
Fractal Black™ - 特徴

- 高い放射率/低反射率
- 低アウトガス
- クラス 1 クリーンルームで適用可能
- 非粒子化特性
- -269~350℃の耐熱性
- クリーニング可能
- 簡単な取り扱い方法

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
- 光学システム全般
- IR システム
- レーザーデバイス関連

Removable surface protection film
Black coated aluminium foil
Adhesive
Release liner



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