

PRODUCT DESCRIPTION

Removable tape
Acktar Black foil
Adhesive
Liner

Spectral Black™ coated foil delivers wide-band low reflectance across the spectrum from the EUV thru the VIS to the FIR as well as a range of features and advantages and is applied in a wide range of stray light suppression and other applications where direct coating of parts is not practical.

FEATURES

- ✓ *Broad-band optical performance*
- ✓ *Broad operational temperature range*
- ✓ *No particulation – clean room compatible*
- ✓ *No outgassing, CVCM < 0.001*
- ✓ *Biocompatible – no cytotoxicity*
- ✓ *No laser induced fluorescence*
- ✓ *High laser damage threshold (LDT)*
- ✓ *Cleanable*
- ✓ *Die cuts /kiss-cuts options*

Detailed test reports are available.

TYPICAL APPLICATIONS

Solution for Stray light, scattered light and low signal to noise problems

Opto -Mechanics

Projectors and Displays

Laser Systems

Mobile Phones

Automotive

Life Science

Testing and Metrology

Spectrometry

Vision and Imaging

Inspection

Housing for optical systems, apertures

Baffles, DLP, DMD, micro optics

Beam dumps, safety screens

Aperture stop, Barrels, IR sensors

HUD, cover plate for VIS-NIR-IR camera, light guide module

Low fluorescence array, Lab on a foil

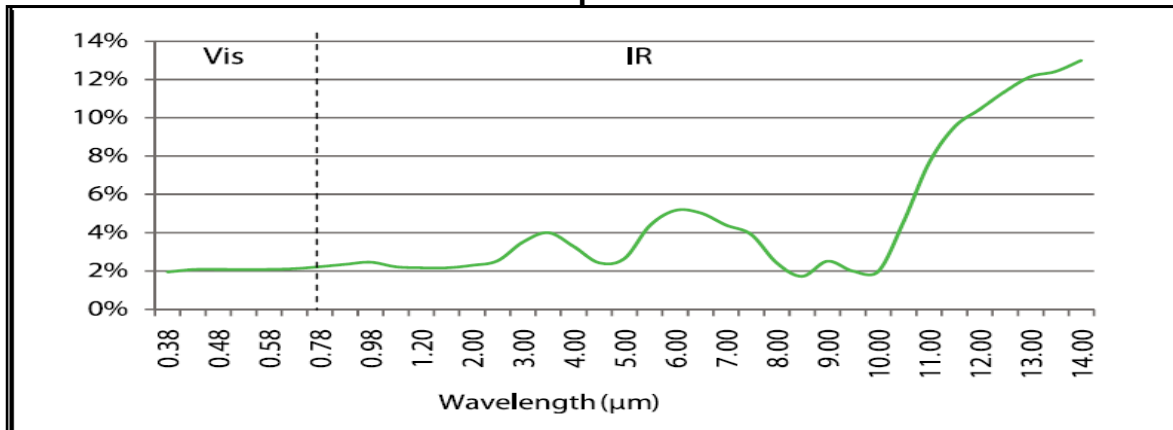
Calibration standards




Elimination of scattering light

Housing and modules

Low outgassing UV absorbers – contrast and sensitivity increase

HEMISPHERICAL REFLECTANCE – Spectral Black



* BRDF data available at    simulations software

SPECIFICATION

Working Temperatures	
without adhesive	long term: -196 °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 low outgassing adhesive	long term: - 40 °C to +150 °C, short term: up to +260 °C
Coating Chemical Content	completely inorganic
Foil Substrate	
material	Aluminum foil - standard
Thickness	total 190 microns nominal applied to surface
coating	3-7 microns
adhesive	60 microns standard
foil substrate	125 µm - standard
Abrasion Resistance	moderate
Humidity Resistance	MIL-C- 48497A
Storage and Shelf Life – adhesive limited	
storage conditions	indoor conditions (temperature approx. 21°C; RH approx. 50%)
standard shelf life	To obtain best performance, applied adhesive and remove protective within 12 months from shipment
Cleanability	compressed dry air or nitrogen
Delivery Formats	standard – sheets 200 mm width
Additional Options	roll format or die cuts
	Humidity Proof
	Hi-temp adhesive 180°C long term
	substrate materials and thicknesses

*All 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.

The contents of this document are copyright © Acktar Ltd. and must not be used, copied, or disclosed to any third parties without prior written permission from Acktar Ltd.

Application instruction – Step by step

To ensure best performance of the taped labels from storage to application, we recommend on the following procedures:

(1) Storage

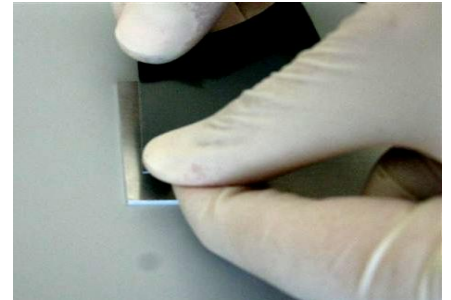
Room temperature dry conditions - protected from direct UV light (sunlight)

Surface Preparation

The surface, on which labels are to be taped, must be clean, dry, and free of oil and dust. Recommended cleaning solutions are IPA and Ethanol

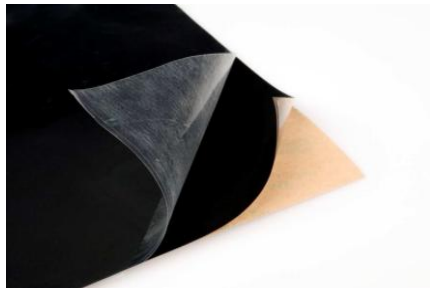
(5) Edge Attachment

Align and apply one edge of the bare adhesive to the surface - making sure that it is firmly attached with no loose regions



(2) Structure – from top to bottom:

- a. removable protective layer
- b. coated foil
- c. adhesive layer
- d. adhesive release liner



(6) Preform Attachment

Attach the film to the surface using a roller



(3) Tools

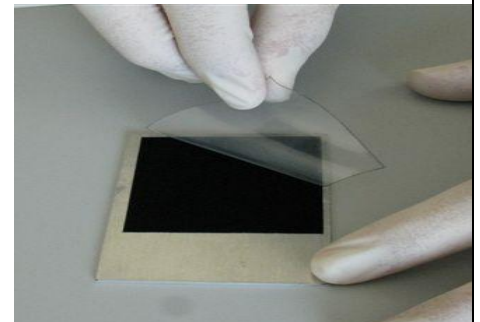
sharp knife, roller, powder free latex gloves



(7) Protective Layer Freeing

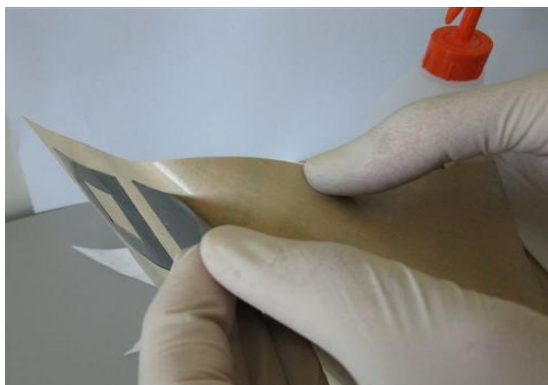
Separate a corner of the protective film and Strip off the protective layer.

*Clean coating with Dry air /N2 purging



(4) Adhesive Release Liner Removal

Gently release the black film from liner.



Think Acktar Think Black!

For complex shape or parts –please consider our direct coating applications.

Acktar coating can be applied directly to any substrate material.

Looking forwards to your feedback!

www.acktar.com