



ACKTAR

The World's Leader in Black Coatings

KEY APPLICATION AREAS



Straylight suppression

~ 99 % absorptance

Passive thermal management

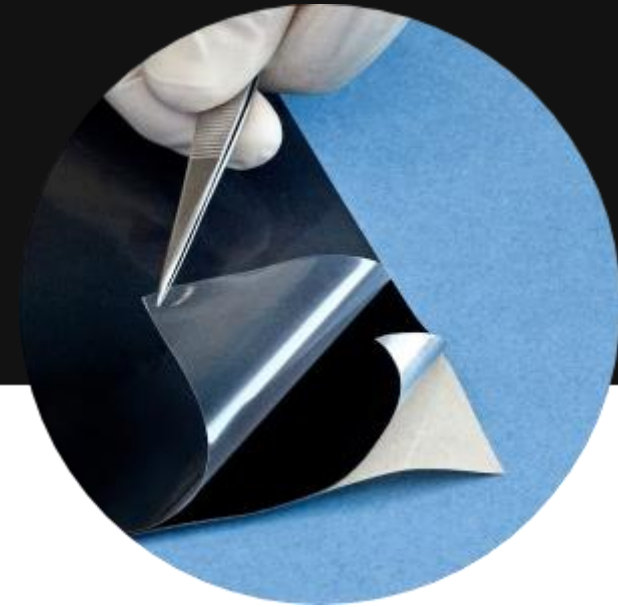
Choose your solar absorptance
and emissivity values

WHAT WE DO

Nano-level surface coatings for demanding applications

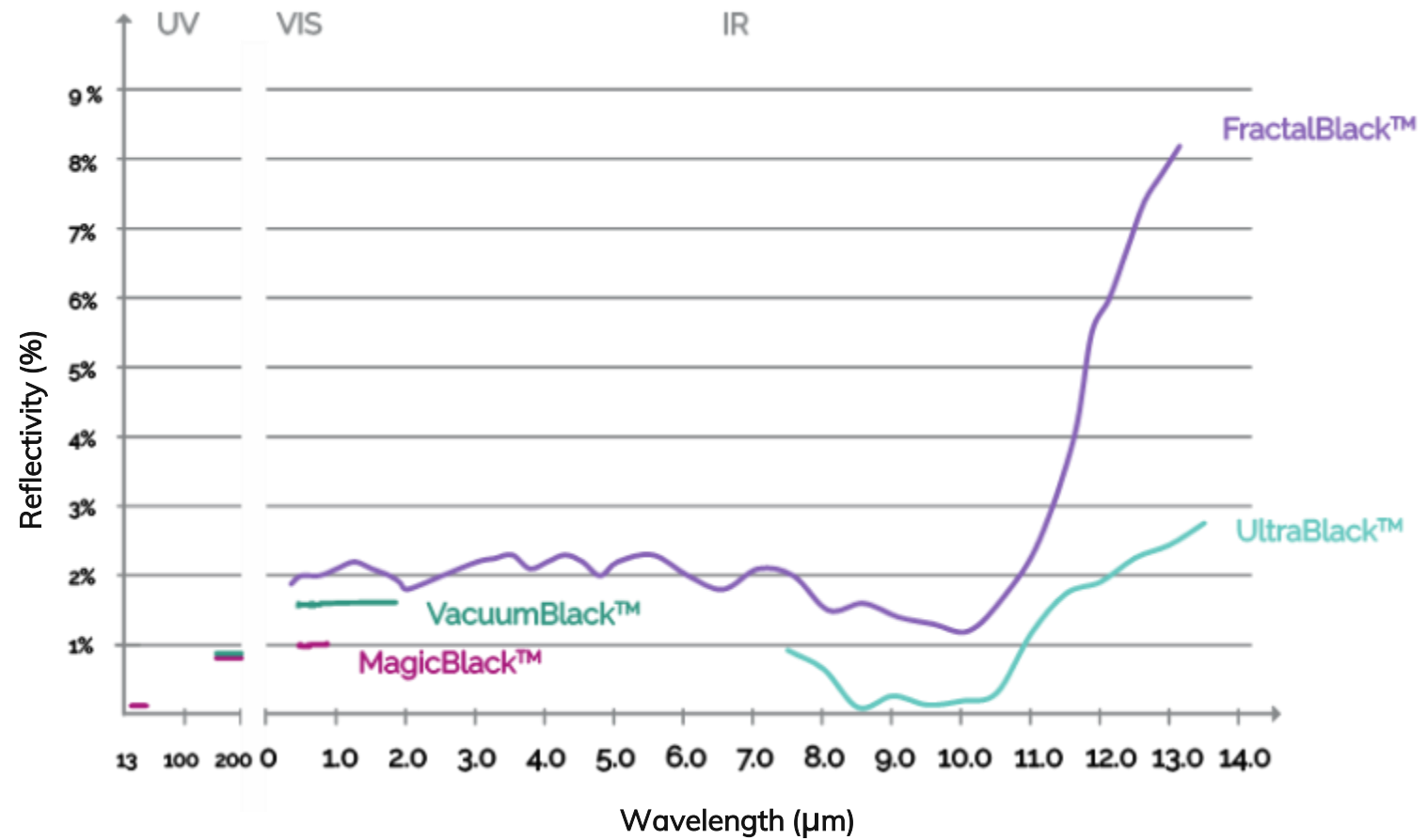


Coated 3D parts



Black & white films, sheets & rolls

STRAY LIGHT SUPPRESSION



Coating Thickness [μ]	
Ultra Black	25-30
Magic Black	3-5
Fractal Black	5-14
Vacuum Black	3-5

WHY ACKTAR?

10 REASONS FOR CHOOSING ACKTAR



99% Absorptance



Extremely low outgassing



Thermal stability 4°K- +723°K



Adhesion to metals, glass, ceramics
& polymers



Only few microns thick



Negligible particulation & high
vibration stability



Abrasion resistant & high resistance
to solvents



REACH/RoHS compliant,
ecologically clean



Electrically conductive or
non-conductive options



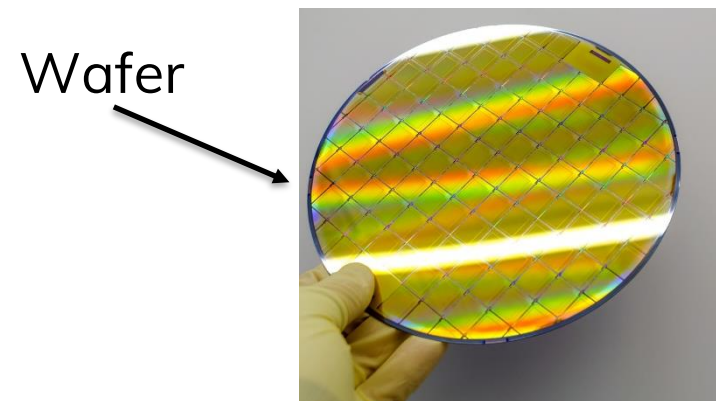
100% reworkable



ACKTAR CORE BLACK™

NEW COATING - ACKTAR CORE BLACK™ FOR WAFER CHUCKS AND COMPONENT MOUNTING

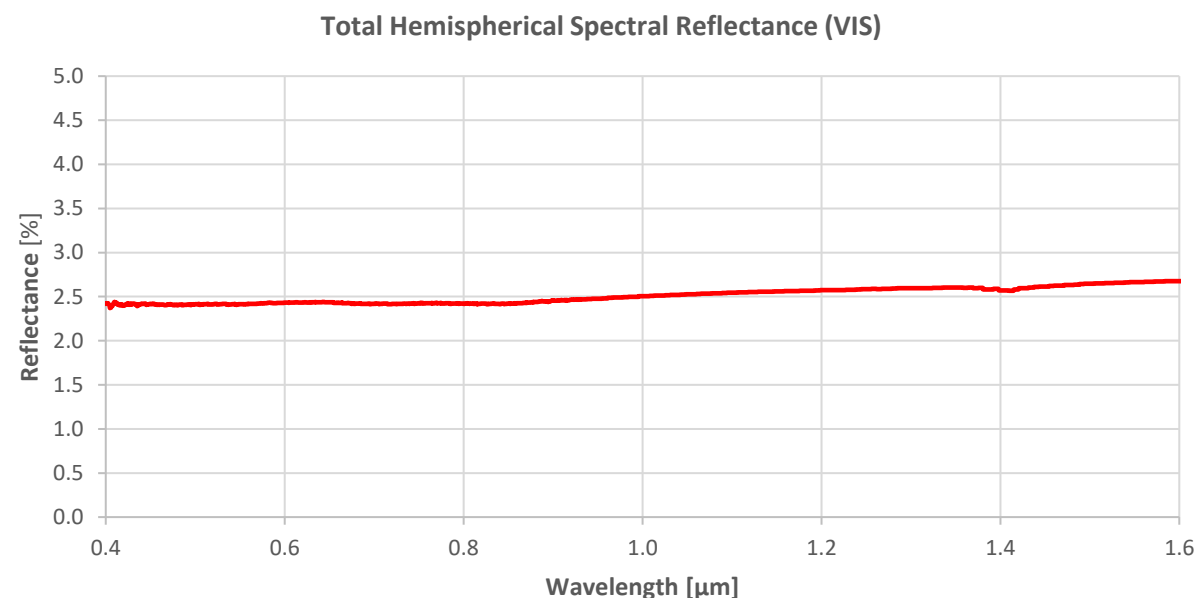
- Wafer chucks should be:
 - Extremely flat
 - Avoid bending the chip
 - Avoid defects in manufacturing processes
 - Ensure uniform layer deposition
 - Abrasion resistant
 - Wafers are being constantly loaded and unloaded
 - Making the surface less flat, less black, and harming the vacuum that holds the sample in place



NEW COATING - ACKTAR CORE BLACK™ FOR WAFER CHUCKS AND COMPONENT MOUNTING

Acktar Core Black™

- Core Black™ has exceptional durability
- Ensures a flatness of ~2-3 microns
- “Less Black” than our usual black coatings
- Ultra Clean: MOC ~ 1ng/cm², PAC < 30 ppm

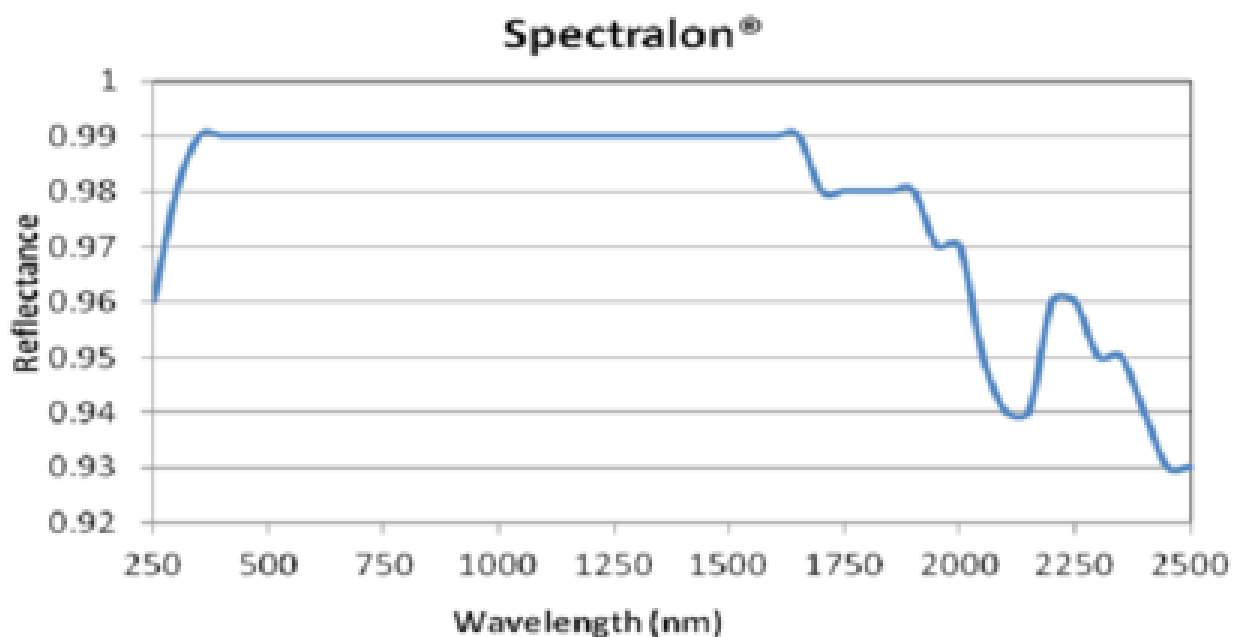




ACKTAR DIFFUSIVE MIRROR FOIL™

SPECTRALON™

- Spectralon is a very highly reflective, diffusive white material
- Used to calibrate optical instruments
- >99% reflectance across UV-NIR
- Made out of PTFE (Teflon)



PFAS / PTFE

- PTFE is problematic environmentally
 - It can last hundreds to thousands of years without breaking down
 - PTFE manufacturing includes PFAS, chemicals that have been linked to:
 - Cancer
 - Hormonal disruption
 - Immune system effects
 - Environmental contamination (groundwater, oceans)
 - Harmful gases are released into the atmosphere during manufacturing

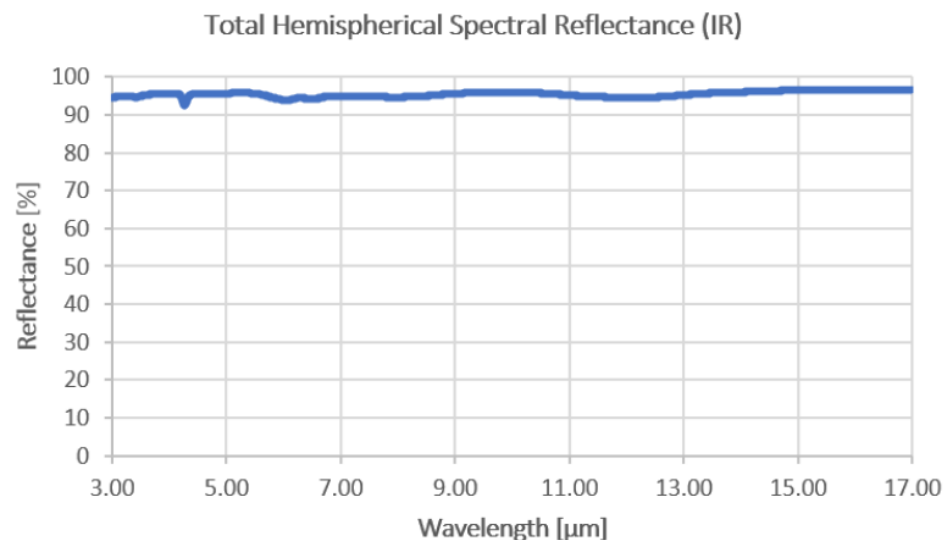
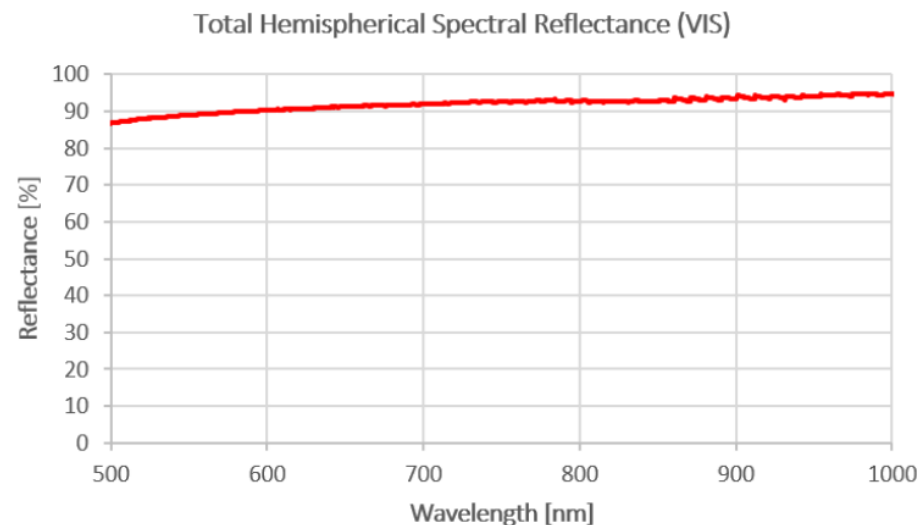
**THERE IS AN INCREASING PRESSURE
WORLDWIDE TO LIMIT AND FIND ALTERNATIVES
TO PTFE AND PFAS**

- EU + Canada – wants to ban the usage of PTFE
- US – some states are banning the usage of PFAS in consumer products

ACKTAR DIFFUSIVE MIRROR FOIL TM

FOR OPTICAL TESTING AND CALIBRATION

Nearly ideal Lambertian, diffuse reflectance across a wide spectral range.



- REACH AND RoHS COMPLIANT alternative to PFAS materials
- Total Hemispherical Reflectance exceeding 90% from 0.4 to 17 μm, with a spectrally flat response across the VIS, NIR, and IR regions
- Substrate: Stainless steel
- Thickness <5 μm, weight 1 mg/cm²
- 100% inorganic
- Surface resistivity in dissipative range

THANK YOU!

DO YOU HAVE ANY QUESTIONS?

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