

CHEMISTRY THAT MATTERS™

سابک
sabic

WHEN SEEING CLEARLY MATTERS MOST

INTRODUCING LEXAN™ HP92AF
ANTI-FOG FILM, FOR LENSES USED
IN HIGH HUMIDITY ENVIRONMENTS





From automotive applications and lighting application to anti-fog lens products, LED/LCD displays, battery packs, ID cards and much more, SABIC's Functional Forms business offers high-quality, engineered thermoplastic LEXAN™ films across a wide variety of industries.

Employees in Healthcare, Manufacturing, Meat Packing Industries are using safety goggles and face shields more than ever and for longer periods of time during a typical workday. They need full visibility from their PPE to perform their tasks safely even under high humidity environments. SABIC's LEXAN™ HP92AF Anti-fog film offers anti-fog, impact resistance and excellent optical clarity. This means that safety goggles, medical instrument lenses and face shields stay clear in high humidity environments even when sudden changes in temperature occur. The masking is of the cling type on the uncoated side and of the stick type on the coated side.

TYPICAL APPLICATIONS

- Safety goggles
- PPE clear face shields in high humidity environments
- Motorcycle visors
- Ski goggles
- Automotive cluster lenses
- Medical instrument lenses & displays
- Industrial lenses

PROPERTIES



ANTI-FOG

Maintains clarity with no flashover (fogging)



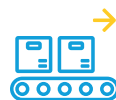
EXCELLENT OPTICAL CLARITY

Light Transmission >88%



HIGH IMPACT STRENGTH

Virtually unbreakable and resistant to abrasion



EASE OF PROCESSING

Easy to die cut without debris



CHEMICAL RESISTANCE

Withstands repeated cleaning



PRINTABLE

for customized design and aesthetics

TYPICAL PROPERTY VALUES

PROPERTY	ASTM (ISO) TEST METHOD	UNITS USCS (SI)	VALUE
MECHANICAL			
Tensile Strength			
@ Yield	ASTM D882 (ISO 527)	psi (MPa)	8800 (60)
Ultimate	ASTM D882 (ISO 527)	psi (MPa)	9000 (62)
Tear Strength			
Initiation	ASTM D1004	lb/mil (kN/m)	1.51 (264)
Propagation	ASTM D1922	g/mil (kN/m)	40 (14)
THERMAL			
Vicat Softening Temperature, B	ASTM 1525	°F (°C)	320 (160)
Heat Deflection Temp. by TMA at 1.8 Mpa	ISO 75 Modified	°F (°C)	290 (145)
Shrinkage at 302°F (150°C)	ASTM D1204	%	1.40%
PHYSICAL			
Anti-fog Properties	Exposure to 50C Water	Time to Fog	No flash over
Density	ASTM D792 (ISO 1183)	slug/ft ³ (kg/m ³)	2.3 (1200)
Thermoforming		% Thinning	<10
Pencil Hardness (coated surface)	ASTM D3363	-	B-HB
Taber Abrasion	ASTM D1044	delta Haze	15-20%
OPTICAL			
Refractive Index @77°F (25°C)	ASTM D542A	-	1.5
Light Transmission	ASTM D1003	%	>88
Yellowness Index	ASTM D1925	%	0.6
Haze	ASTM D1003	%	<0.5

CHEMICAL RESISTANCE

CHEMICAL CLASS	EFFECTS
Alcohols	Generally compatible, tested at 1 hour continuous surface contact at 73 °F
Acetone	Not compatible
Detergents and Cleaners	Generally compatible, tested at 24 hours surface contact at 120 °F Cleaners like Mr. Clean* and Windex w/Ammonia D**
Flavors	Not compatible for concentrates such as coffee, tea, mustard, ketchup
Gasoline	Not compatible at elevated temperatures and stress levels

* Mr. Clean are registered trademarks of Procter & Gamble,
** Windex w/Ammonia D is a registered trademark

NOMINAL GAUGE RANGE

7 mil (0.175mm) to 30 mil (0.762mm)
and width 48" (1220mm)

CLEANING

A mixture of IPA and water (50/50), or dilute soap and water (Dawn or any other liquid dish soap) would be the best recommendation, as the chemical resistance is lower than other HP films due to the Anti-Fog coating.

WITHOUT
ANTI-FOG

WITH
ANTI-FOG



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