# Azora<sup>™</sup> Photochemical Bulk Filter

*Groundbreaking new filtration media developed to drastically improve critical photochemical performance* 

Azora<sup>™</sup> cartridge photochemical filters offer best-in-class contamination control for advanced, bulk photochemical applications targeting advanced technology nodes. Materials that most benefit from Azora filtration include EUV photoresists, immersion ArF photoresists, and critical underlayers.

The innovative membrane morphology of the polyimide material provides a unique tortuous flow path throughout the thickness of the membrane, increasing the chance of removal by impaction and collision effects. With superior contaminant retention, this membrane technology removes potential defect sources, improving critical photochemical performance and enabling users to meet critical process demands at advanced technology nodes.

Our Azora cartridge photochemical filter portfolio includes Azora Gen 1, our first generation membrane, and Azora Gen 2, our second generation innovative membrane designed with greater retention performance for sub-5 nm technology nodes including EUV applications.

## **APPLICATIONS**

- Advanced photochemical and raw materials
- Advanced photosolvents



The Azora filter membrane provides superior contaminant retention.

# **FEATURES & BENEFITS**

Polyimide material	Compatible with photoresists, photo solvents, and acidic chemicals*
	Provides excellent mechanical and thermal strength
Innovative membrane morphology	Morphology creates a highly tortuous flow path to enhance contaminant removal efficiency
Higher porosity with tortuous flow path	Enhances filtration efficiency without sacrificing flow rate

\*Not compatible with alkaline solution TMAH

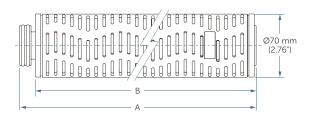


# **SPECIFICATIONS**

		Azora Gen 1 bulk cartridge filters	Azora Gen 2 bulk cartridge filters	Azora Gen 1 disposable filters	Azora Gen 2 disposable filters
Materials of construction	Membrane	Polyimide			
	Supports, core, sleeve, shell/housing	High density polyethylene (HDPE)			
	O-ring (222)	Encapsulated FKM (E-FKM)		_	
Connections		Code 0		1/4" comporession fitting	
Membrane area		10": 1.01 m <sup>2</sup> (10.9 ft <sup>2</sup> ) 20": 2.09 m <sup>2</sup> (21.7 ft <sup>2</sup> )	10": 1.31 m <sup>2</sup> (14.1 ft <sup>2</sup> ) 20": 2.62 m <sup>2</sup> (28.2 ft <sup>2</sup> )	0.22 m	<sup>2</sup> (2.4 ft <sup>2</sup> )
Hold-up volume		_		160 cc	
Maximum operating conditions	Maximum inlet pressure	-		0.34 MPa (3.4 bar, 50 psi) @ 25°C (77°F)	
	Maximum forward/reverse differential pressure	0.24 MPa (2.4 bar; 50 psi) @ 25°C (77°F)		0.27 MPa (2.7 bar; 39 psi) @ 25° (77°F)	
	Maximum temperature	60°C (140°F)			
Flow performance	Typical device pressure drop	10": 1.9 L/min @ 0.02 MPa 20": 3.6 L/min @ 0.02 MPa	10": 2.2 L/min @ 0.04 MPa 20": 4.4 L/min @ 0.04 MPa	1.4 L/min @ 0.06 MPa	0.7 L/min @ 0.06 MPa
Format	Length	10", 20"			-
	Diameter	70 mm		_	

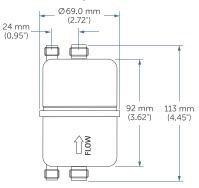
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Azora Bulk Cartridge Filters – Code 0 (70 mm width) Without Chemlock<sup>®</sup> Key



Length	Α	В
10"	262.3 mm (10.33")	245.0 mm (9.65")
20"	506.6 mm (19.94")	489.2 mm (19.26")

Azora Photochemical Disposable Filters



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## **ORDERING INFORMATION**

PART NUMBER	PRODUCT TYPE	CLEAN	FORMAT	MEMBRANE
AZ0101MTU3	Cartridge filter	Ultraclean	10", 70 mm	Azora Gen 1
AZ0102MTU3	Cartridge filter	Ultraclean	20", 70 mm	Azora Gen 1
AZ010S2S1U3	Disposable filter	Ultraclean	Short	Azora Gen 1
AZ0201MTU3	Cartridge filter	Ultraclean	10", 70 mm	Azora Gen 2
AZ0202MTU3	Cartridge filter	Ultraclean	20", 70 mm	Azora Gen 2
AZ020S2S1U3	Disposable filter	Ultraclean	Short	Azora Gen 2

### FOR MORE INFORMATION

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