

SURFACTANT-FORMULATED DICING SOLUTION



BPS-729-B surfactant-formulated dicing solution is used as an additive to DIW during the dicing process for high-performance cleaning through superior wetting. In addition to preventing adherence of silicon particles and swarf (saw residue) on Al and Cu substrates, this product can also remove oxidation from bond pads. Because of the very low etch rate on various base materials, these substrates are not affected.

BPS-729-B surfactant-formulated dicing solution is recommended for use between 500:1 and 2000:1 for standard dicing application, and at stronger concentrations for Copper Oxide removal applications.

Treatment is typically followed by a DI water rinse and dry as is normally performed within the dicing machine or on a standalone tool.

BENEFITS

Room temperature application

Does not attack the base metal

Works on Cu, Al, Sn, among others

Eliminates the need for scrubbing the wafer post-saw

Eliminates the need for CO₂ sparged DIW

High conductivity even at high dilutions which helps to dissipate electrostatic charge on ESD-sensitive devices

surface tension even at high dilutions which promotes excellent swarf and particle removal

Removes oxides that lead to poor wire bonding

TYPICAL PHYSICAL PROPERTIES

Form:	Liquid
Color:	Clear
Density:	64.301 lb/ft3 (1.03 g/cm3)
рН	5.5-6.5

MATERIAL COMPATIBILITY

Wetted Parts	O-Rings	
High-density polyethylene (HDPE)	FEP Encapsulated Viton	
PFA	Kalrez	
PTFE	EPR	
PVDF		
Polypropylene		
Stainless Steel 316		

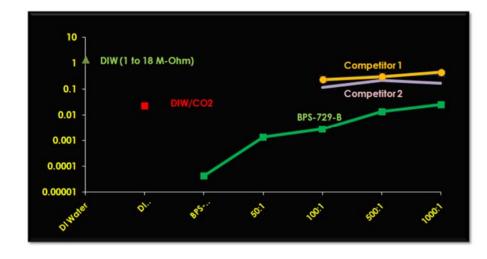
INSTRUCTIONS FOR USE



ETCH RATES MATERIALS

ETCH RATES (Å/MIN) @ 500:1 DILUTION; 25°C

Al	<1
Cu	<1
SiN	TBD
TiN	TBD

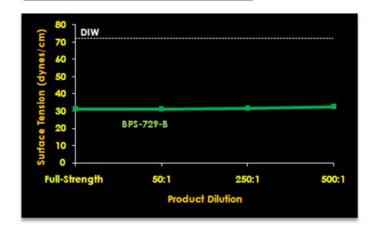


PERFORMANCE DATA
RESISTIVITY VERSUS DILUTION AGAINST
CO₂-SPARGED DIW AND COMPETITIVE
PRODUCTS

BPS-729-B SURFACTANT FORMULATED DICING SOLUTION REDUCES RESISTIVITY OF DIW MORE EFFECTIVELY THAN CO₂ AND THE COMPETITION!

Product Dilution	BPS-729-B Surface Tension (dynes/cm)
Full-Strength	31.2
50:1	31.3
250:1	31.8
500:1	32.6
1000:1	34.7

SURFACE TENSION VERSUS DILUTION



THIS PRODUCT REDUCES RESISTIVITY OF DIW MORE EFFECTIVELY THAN CO₂ AND THE COMPETITION!

PH VERSUS DILUTION

DILUTION	PH
No dilution	5.7
50:1	6.4
100:1	6.5
250:1	6.6
500:1	6.6
1000:1	6.6



STANDARD PACKAGING



For more information, please contact us at:

VERSUM MATERIALS, LLC
VERSUMMATERIALS.COM

The information contained herein is offered without charge for use by technically qualified personnel at their discretion and risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto.