

# AZ<sup>®</sup> 5200

## i-Line Photoresist DATA SHEET

### Description

AZ<sup>®</sup> 5200 is the original i-line photoresist. The product line includes a range of film thicknesses. The resist may be developed in spray-puddle processes with a variety of metal-ion-free developers, both with and without surfactant. For high throughput batch processing in a tank, inorganic developers are an excellent alternative.

### Recommended Process

SOFTBAKE	90-100°C hotplate, 30-60 sec
EXPOSURE	i-line exposure tool
POST-EXPOSURE BAKE	none unless special application required
DEVELOPER	AZ <sup>®</sup> 300 or 440 MIF developer; AZ <sup>®</sup> 400K 1:4 developer
DEVELOP CYCLE	30-50 sec spray at 100-200 rpm; 23 ± 1°C batch for 60-120 sec

### Features

Wide exposure latitude

High thermal stability

Excellent photospeed and resolution

Use of PEB for special applications

### Benefits

• Provides higher yields

• Maintains profile quality during plasma etching and ion implant processes  
• Vertical profiles for accurate pattern transfer in plasma and reactive ion etching

• Provides better throughput

• Provides extremely narrow line spacing and lift-off processes  
• Thermal stability can be extended up to 250°C

### Solvent Safety

AZ 5200 photoresist is formulated with propylene glycol monomethyl ether acetate (PGMEA) safer solvent, which is patented for use in photoresists by Clariant AG (U.S. patent number 4,550,069). PGMEA is among the best tested and safest photoresist solvents available.

### Equipment Compatibility

AZ 5200 photoresist is compatible with all commercially available wafer and photomask processing equipment. Recommended materials of construction include stainless steel, glass, ceramic,

PTFE, polypropylene, and high density polyethylene.

### Storage

Keep in sealed original containers away from oxidants, sparks, and open flames. Protect from light and heat. Keep refrigerated. Empty container may contain harmful residue and vapors.

### Handling Precautions/First Aid

Refer to the current Material Safety Data Sheet (MSDS) for detailed information prior to handling.

## Product List

Product Code	Product Name	Package
70D9302	AZ® 5214-E Photoresist	HDPE gallon bottles
70E3302	AZ® 5214-E IR Photoresist	HDPE gallon bottles
70E3482	AZ® 5214-E IR Photoresist	4-Liter NOWPAK® containers
70E3491	AZ® 5214-E IR Photoresist	10-Liter NOWPAK® containers
70J8302	AZ® 5218-E Photoresist	HDPE gallon bottles
70J8491	AZ® 5218-E Photoresist	10-Liter NOWPAK® containers

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### U.S. Headquarters Office:

Clariant Corporation  
AZ Electronic Materials  
70 Meister Avenue  
P.O. Box 3700  
Somerville, NJ 08876  
(908)429-3500  
(908)429-3631 fax  
www.azresist.com

### Regional Sales and Service Offices:

#### United States and Canada

Clariant Corporation  
AZ Electronic Materials  
Somerville, NJ (800) 515-4164  
Sunnyvale, CA (408) 616-2100  
Dallas, TX (800) 422-3884

#### Europe and Far East

Clariant GmbH  
Wiesbaden 49 (611) 962-6867  
Clariant (Japan) K.K.  
Tokyo 81-3-5977-7937  
Clariant Industries Limited (Korea)  
Seoul 82-2-510-8000