

SEMICONDUCTOR SOLUTIONS

Aqueous



Chemraz®: The Preferred Choice for Semiconductor Sealing Solutions

Greene Tweed's broad range of Chemraz® formulations are utilized by some of the world's leading semiconductor fabs because of their superior performance and reliability. Chemraz® sealing solutions provide customers with an increased MTBR (mean time between repair) to reduce downtime and maintenance costs.

Superior Performance

- Minimal extractable ion content
- Exceptional chemical resistance
- Low particle generation
- High dimensional stability

Operational Benefits

- Superior reliability
- Enhanced repeatability
- Maximum system uptime
- Lower cost of ownership

A Full Range of Materials for Every Fab

Greene Tweed offers a full spectrum of materials to suit the needs of a variety of semiconductor fabs. Greene Tweed has sealing solutions for fabs utilizing the most advanced technology nodes in the most aggressive operating environments, as well as those requiring less stringent particle process controls.

Material	Compression Set @25% Deflection - %	Hardness, Shore A	Max Service Temperature
Chemraz® 571 Durable compound for wet applications with high sealing loads	70 hours @ 204°C 35%	80	210°C
Chemraz® 570 Minimal particulation and excellent chemical resistance	70 hours @ 204°C 35%	70	210°C
Chemraz® 551 Broad chemical resistance at high temperatures	70 hours @ 204°C 20%	80	316°C

Process Applications

Chemraz® materials can be utilized in a wide variety of aqueous processes, including:

- Wet etch (acid, base)
- Wet stripping (solvents)
- Wet cleaning (UPDI)
- Wet metal plating
- Chemical Mechanical Planarization (CMP)
- Chemical and deionized (DI) water handling systems

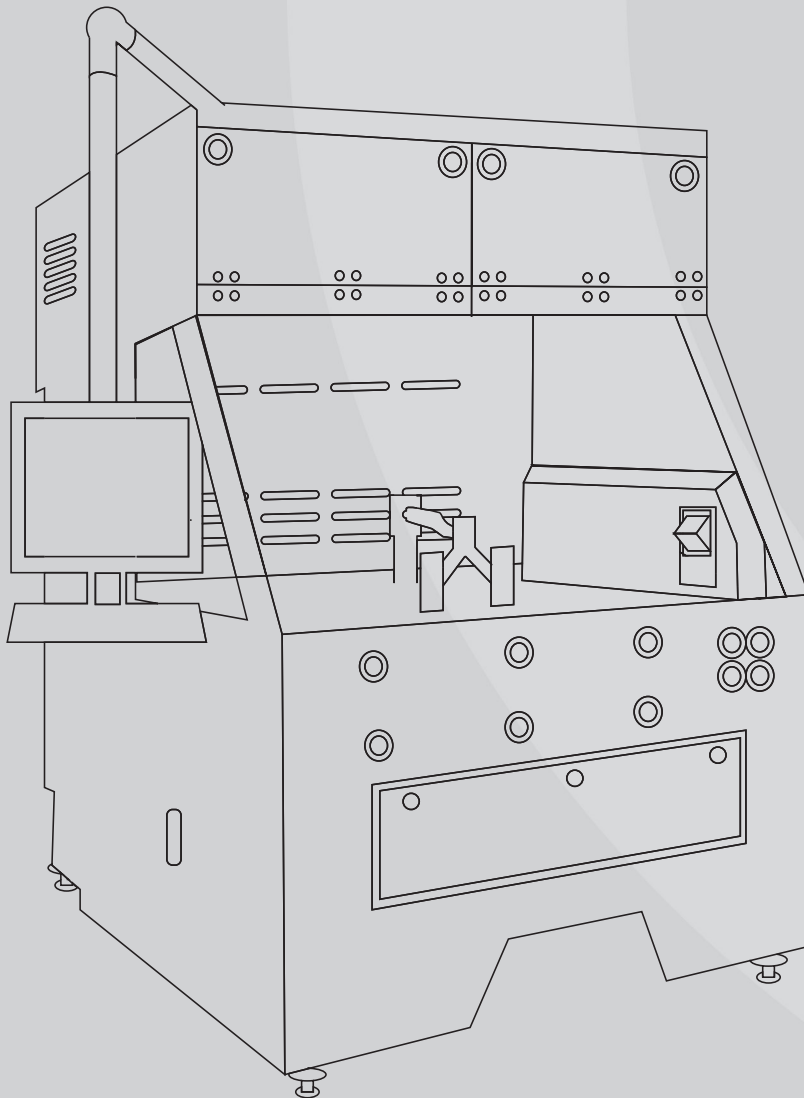


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Process	Typical Application Temperatures	Process Environments	Recommended Products
Wafer Preparation	25 – 125°C	UPDI, Pirahna, SC-1, SC-2, O ₃ , HF (49%)	Chemraz® 570, 571, 551

Dynamic Applications	Static Applications
Door Seals Valves (check valves, shutoff valves, etc.)	Lid Seals Drain Seals Filters and Filter Housings Wet Stations (cleaning and etching)



The Greene Tweed Advantage

Greene Tweed has been developing high-performing sealing solutions to withstand the extreme conditions in semiconductor fabs since the 1980s, and has continually evolved to meet the increasingly demanding needs of the industry.

Greene Tweed leverages decades of engineering and applications expertise to design customized solutions, including material selection and hardware design based on specific operating environments, such as acids, solvents, bases, and ultra-pure H₂O applications.

Contact Us

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Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.

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