

# CHEMRAZ<sup>®</sup>

(FFKM) Overview



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	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
General Purpose	504	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pump housings</li> <li>Sampling/metering equipment</li> <li>Reactors</li> <li>Mixers</li> <li>Controls/instrumentation</li> <li>Sprayers/dispensers</li> <li>Couplings</li> </ul>	<ul style="list-style-type: none"> <li>Broad chemical compatibility for use with wide range of harsh solutions</li> <li>Lower compression set increases ability to handle temp &amp; pressure variations, shaft misalignment, &amp; o-ring shrinkage</li> <li>Low temp capabilities (-30°C/-22°F)</li> </ul>	-30°C to 230°C (-22°F to 446°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Caustics</li> <li>Aldehydes</li> <li>Esters</li> <li>Aromatics</li> <li>Hot water/steam</li> <li>Amines</li> <li>Methanol</li> <li>Ketones</li> <li>TBA</li> <li>MTBE</li> </ul>
	505	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pump housings</li> <li>Reactors</li> <li>Compressors</li> <li>Sampling/metering equipment</li> <li>Mixers</li> <li>Controls/instrumentation</li> <li>Sprayers/dispensers</li> <li>Coupling</li> </ul>	<ul style="list-style-type: none"> <li>Broad chemical compatibility for use with a wide range of harsh solutions</li> <li>Lower compression set increases ability to handle temp and pressure variations, shaft misalignment, &amp; o-ring shrinkage</li> </ul>	-30°C to 230°C (-22°F to 446°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Caustics</li> <li>Aldehydes</li> <li>Esters</li> <li>Ethers</li> <li>Aromatics</li> <li>Hot water/steam</li> <li>Amines</li> <li>Methanol</li> <li>Ketones</li> <li>TBA</li> <li>MTBE</li> </ul>
	510	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pump housings</li> <li>Sampling/metering equipment</li> <li>Reactors</li> <li>Mixers</li> <li>Controls/instrumentation</li> <li>Sprayers/dispensers</li> <li>Couplings</li> <li>Compressors</li> </ul>	<ul style="list-style-type: none"> <li>Broad chemical compatibility</li> <li>Low temp capabilities (-30°C/-22°F)</li> <li>Higher hardness and density reduces likelihood of gap extrusion</li> </ul>	-30°C to 230°C (-22°F to 446°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Caustics</li> <li>Aldehydes</li> <li>Esters</li> <li>Aromatics</li> <li>Hot water/steam</li> <li>Amines</li> <li>Methanol</li> <li>Ketones</li> <li>TBA</li> <li>MTBE</li> </ul>
	513	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Door seals</li> <li>Slit valves</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Lid seals</li> <li>Gas inlet seals</li> <li>KF fitting seals</li> </ul>	<ul style="list-style-type: none"> <li>Good plasma resistance</li> <li>Good physical properties</li> <li>Minimal contamination</li> <li>Excellent performance history as “universal product”</li> </ul>	-30°C to 210°C (-22°F to 410°F)	–

	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
General Purpose	514	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pump housings</li> <li>Reactors</li> <li>Mixers</li> <li>Sprayers/dispensers</li> <li>Couplings</li> </ul>	<ul style="list-style-type: none"> <li>No carbon black residue</li> <li>Low-temp capabilities (-30°C/-22°F)</li> </ul>	-30°C to 220°C (-22°F to 428°F)	-
	520	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Door seals</li> <li>Slit valves</li> <li>Isolator valve seals</li> <li>Lid seals</li> <li>Gas inlet seals</li> <li>KF fitting seals</li> </ul>	<ul style="list-style-type: none"> <li>Excellent plasma resistance</li> <li>Outstanding physical properties</li> <li>Low contaminants</li> <li>Withstands higher sealing loads</li> <li>Excellent performance history in higher temp applications</li> </ul>	-30°C to 240°C (-22°F to 464°F)	-
	543	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Door seals</li> <li>Slit valves</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Lid seals</li> <li>Gas inlet seals</li> <li>KF fitting seals</li> </ul>	<ul style="list-style-type: none"> <li>Good plasma resistance</li> <li>Good physical properties</li> <li>Minimal contamination</li> <li>Excellent performance as a “universal product”</li> </ul>	-30°C to 210°C (-22°F to 410°F)	-
	550	Semiconductor	Aqueous wafer processing equipment seals: <ul style="list-style-type: none"> <li>Valve seals</li> <li>Fitting &amp; union seals</li> <li>Gaskets</li> <li>Regulator seals</li> <li>Filter seals</li> </ul>	<ul style="list-style-type: none"> <li>Good chemical resistance &amp; physical properties</li> <li>Used where contamination requirements are less critical</li> <li>Excellent performance history</li> </ul>	-30°C to 210°C (-22°F to 410°F)	-



	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
General Purpose	551	Semiconductor	<p>Aqueous wafer processing equipment and chemical/DI water distribution system seals:</p> <ul style="list-style-type: none"> <li>Valve seals</li> <li>Fitting and union seals</li> <li>Gaskets</li> <li>Regulator seals</li> <li>Filter seals</li> <li>Dispensing seals</li> </ul>	<ul style="list-style-type: none"> <li>Broad chemical compatibility</li> <li>High-temp capability</li> <li>Excellent compression set</li> <li>Breadth of capabilities allows for standardization on one material &amp; reduces inventory line items</li> <li>Longer &amp; better seal integrity in seal applications; lower overall equipment cost of operation</li> </ul>	-12°C to 316°C (-10°F to 600°F)	–
	584	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Sampling/metering equipment</li> <li>Pump housings</li> </ul>	<ul style="list-style-type: none"> <li>Superior chemical resistance for use in strong oxidation fluids &amp; hot aqueous solutions as well as chlorine &amp; ozone</li> <li>No carbon black residue</li> </ul>	-30°C to 220°C (-22°F to 428°F)	–
	592	Semiconductor	<p>Dry wafer processing equipment seals:</p> <ul style="list-style-type: none"> <li>Slit valve seals</li> <li>Lid seals</li> <li>Endpoint windows</li> <li>Valve seals</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Gas inlet seals</li> <li>Bell jar seals</li> <li>KF fitting seals</li> </ul>	<ul style="list-style-type: none"> <li>Excellent physical properties</li> <li>Inert mineral filler system provides excellent resistance to plasma attack</li> <li>Good static &amp; dynamic performance</li> </ul>	-30°C to 240°C (-22°F to 464°F)	–
	600	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Pump housings</li> <li>Reactors</li> <li>Mixers</li> <li>Valves</li> <li>Compressors</li> </ul>	<ul style="list-style-type: none"> <li>High durometer &amp; high-density material helps withstand high pressure &amp; harsh environments</li> <li>Broad chemical resistance range</li> <li>High-temperature capability</li> </ul>	-20°C to 260°C (-4°F to 500°F)	–

	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
General Purpose	605	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Pump housings</li> <li>Reactors</li> <li>Mixers</li> <li>Valves</li> <li>Compressors</li> <li>Sampling/metering equipment</li> <li>Controls/instrumentation</li> <li>Sprayers/dispensers</li> <li>Diaphragms</li> <li>Couplings</li> </ul>	<ul style="list-style-type: none"> <li>High-temperature capability</li> <li>Excellent compression set resistance</li> <li>Broad chemical compatibility for use with a wide range of harsh solutions</li> </ul>	-20°C to 260°C (-4°F to 500°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Caustics</li> <li>Aldehydes</li> <li>Esters</li> <li>Ethers</li> <li>Aromatics</li> <li>Hot water/steam</li> <li>Amines</li> <li>Methanol</li> <li>Ketones</li> <li>TBA</li> <li>MTBE</li> </ul>
Rapid Gas Decompression Resistance	526	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Pumps</li> <li>Mechanical seals</li> <li>Valves</li> <li>Downhole completion tools</li> <li>Compressors</li> </ul>	<ul style="list-style-type: none"> <li>Excellent RGD resistance</li> <li>Broad chemical resistance</li> <li>Meets RGD requirements of Total GS EP PVV 142 &amp; NACE TM0297</li> <li>ISO 23936-2/ NORSOK M-710</li> </ul>	-20°C to 250°C (-4°F to 482°F)	<ul style="list-style-type: none"> <li>Sour gas</li> <li>Acids</li> <li>Caustics</li> <li>Hot water/steam</li> </ul>
	566 LT	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Deepwater drilling tools</li> <li>Subsea equipment</li> <li>Downhole completion tools used in water injection wells</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional performance in extreme low temps</li> <li>Superior resistance to hostile reservoir chemistries</li> <li>Excellent compression set &amp; thermal shock resistance</li> </ul>	-40°C to 230°C (-40°F to 446°F)	-
	678	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Wireline tools</li> <li>High pressure applications</li> <li>Subsea</li> <li>Downhole Completion tools</li> <li>Downhole drilling tools</li> </ul>	<ul style="list-style-type: none"> <li>Excellent RGD resistance</li> <li>Exceptional performance in extreme low temps</li> <li>Superior resistance to hostile reservoir chemistries, drilling fluid, production chemicals</li> <li>Excellent compression set &amp; thermal shock resistance</li> <li>Meet RGD requirements of ISO 23936-2/ NORSOK M-710</li> </ul>	-40°C to 230°C (-40°F to 446°F)	-
	676	Aerospace	Perfluoroelastomer (FFKM) compound where ultra high-temperature &/or excellent chemical compatibility is required	Meets AMS 7257E	-18°C to 324°C (0°F to 615°F)	Strong chemical resistance to all common Aerospace fluids

	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
High Temperature	555	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pump housings</li> <li>Sampling/metering equipment</li> <li>Reactors</li> <li>Quick connect couplings</li> <li>Mixers</li> <li>Controls/instrumentation</li> <li>Compressors</li> <li>Sprayers/dispensers</li> </ul>	<ul style="list-style-type: none"> <li>Superior high temp capability (316°C/600°F)</li> <li>Broad chemical resistance in wide range of media</li> <li>Excellent compression set maintains seal integrity in wide temp &amp; pressure variations as well as vibration</li> </ul>	-12°C to 316°C (10°F to 600°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Caustics</li> <li>Aldehydes</li> <li>Esters</li> <li>Ethers</li> <li>Aromatics</li> <li>Hot water/steam</li> <li>Amines</li> <li>Methanol</li> <li>Ketones</li> <li>Mixed process streams</li> <li>TBA</li> <li>MTBE</li> </ul>
	562	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Completion tools</li> <li>Electrical submersible pumps</li> <li>Mechanical seals</li> </ul>	<ul style="list-style-type: none"> <li>Excellent compression set resistance</li> <li>Excellent steam &amp; chemical resistance</li> </ul>	-12°C to 316°C (10°F to 600°F)	<ul style="list-style-type: none"> <li>Steam</li> <li>Reservoir fluids with high H<sub>2</sub>S</li> <li>Caustics</li> <li>Hot water/steam</li> </ul>
	615	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Process control instruments</li> <li>Heat exchangers</li> <li>Valves</li> <li>Agitators &amp; mixers</li> <li>Pumps</li> <li>Couplings</li> </ul>	<ul style="list-style-type: none"> <li>Low compression set at continuous temps up to 324°C (615°F)</li> <li>Ability to handle severe thermal cycles</li> <li>Excellent chemical resistance</li> </ul>	-18°C to 324°C (0°F to 615°F)	<ul style="list-style-type: none"> <li>Inorganic &amp; organic chemicals</li> <li>Acids</li> <li>Reagents</li> <li>Heat transfer fluids</li> <li>Hydrocarbons</li> </ul>
	694	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Electrical submersible pumps</li> <li>Downhole completion tools</li> </ul>	<ul style="list-style-type: none"> <li>Superior resistance to hostile reservoir chemistries, drilling fluid, additives, &amp; production chemicals</li> <li>Excellent compression set &amp; thermal shock resistance</li> <li>Increased reliability of components used in critical steam &amp; high-temp environments</li> </ul>	-12°C to 316°C (10°F to 600°F)	<ul style="list-style-type: none"> <li>Inorganic &amp; organic chemicals</li> <li>Acids</li> <li>Hydrocarbons</li> </ul>
	SFX	<ul style="list-style-type: none"> <li>Industrial</li> <li>Semiconductor</li> </ul>	Subfab applications including abatement units, exhaust lines, pumps and valves	<ul style="list-style-type: none"> <li>Broad chemical resistance to typical Subfab effluents</li> <li>Optimized physical properties for long life in static vacuum fittings</li> </ul>	-12°C to 300°C (10°F to 572°F)	<ul style="list-style-type: none"> <li>Chlorine</li> <li>Fluorine</li> <li>Hydrogen</li> <li>Oxygen</li> </ul>

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USP VI/FDA	517	Life Science	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Sampling/metering equipment</li> <li>Pump housings</li> </ul>	<ul style="list-style-type: none"> <li>No carbon black residue</li> <li>Low-temp capabilities (-30°C/-22°F)</li> <li>3-A® &amp; FDA compliant, meeting the highest purity standards</li> </ul>	-30°C to 220°C (-22°F to 428°F)	–
	585	Life Science	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Sampling/metering equipment</li> <li>Pump housings</li> <li>Reactors</li> <li>Mixers</li> <li>Valves</li> <li>Controls/instrumentation</li> <li>Couplings</li> </ul>	<ul style="list-style-type: none"> <li>Superior chemical resistance for use in strong oxidation fluids &amp; hot aqueous solutions as well as chlorine &amp; ozone</li> <li>No carbon black residue</li> <li>3-A® &amp; FDA compliant, meeting the highest purity standards</li> </ul>	-30°C to 220°C (-22°F to 428°F)	–
	625	Life Science	<ul style="list-style-type: none"> <li>Mechanical seals</li> <li>Valves</li> <li>Pumps</li> <li>Mixers fermenters</li> <li>Biomedical equipment</li> <li>Couplings</li> <li>Filters</li> <li>Dryers</li> <li>Agitators</li> <li>Sanitary seals</li> <li>WFI gaskets</li> </ul>	<ul style="list-style-type: none"> <li>Superior high-temperature properties</li> <li>Outstanding hot water &amp; steam resistance</li> <li>3-A® &amp; FDA compliant, meeting the highest purity standards</li> </ul>	-20°C to 260°C (-4°F to 500°F)	<ul style="list-style-type: none"> <li>Fuel handling</li> <li>CIP/SIP operations</li> <li>Pharmaceutical manufacturing</li> </ul>
Wet Applications	570	Semiconductor	<p>Aqueous wafer processing equipment seals:</p> <ul style="list-style-type: none"> <li>Valve seals</li> <li>Fitting &amp; union seals</li> <li>Gaskets</li> <li>Regulator seals</li> <li>Filter seals</li> <li>Dispensing seals</li> </ul>	<ul style="list-style-type: none"> <li>Very low contaminants</li> <li>Extended performance &amp; added reliability</li> <li>Good physical properties</li> <li>Excellent performance history</li> </ul>	-30°C to 210°C (-22°F to 410°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Solvents</li> <li>Ultrapure H<sub>2</sub>O</li> </ul>
	571	Semiconductor	<p>Aqueous wafer processing equipment seals:</p> <ul style="list-style-type: none"> <li>Valve seals</li> <li>Fitting &amp; union seals</li> <li>Gaskets</li> <li>Regulator seals</li> <li>Filter seals</li> <li>Dispensing seals</li> </ul>	<ul style="list-style-type: none"> <li>Very low contaminants</li> <li>Extended performance &amp; added reliability</li> <li>Good physical properties</li> <li>Excellent performance history</li> </ul>	-30°C to 210°C (-22°F to 410°F)	<ul style="list-style-type: none"> <li>Acids</li> <li>Solvents</li> <li>Ultrapure H<sub>2</sub>O</li> </ul>



	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
Clean-Deposition/Etch	629	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Slit valve seals</li> <li>Lid seals</li> <li>Endpoint windows</li> <li>Valve seals</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Gas inlet seals</li> <li>Bell jar seals</li> <li>KF fitting seals</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional plasma resistance in oxygen &amp; fluorine environments</li> <li>Minimal particulation &amp; surface degradation</li> <li>High purity, very low metallic ion content</li> <li>High elasticity allows conformance to hardware &amp; easier seal installation</li> </ul>	-20°C to 260°C (-4°F to 500°F)	–
	639	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Endpoint windows</li> <li>Bell jar seals</li> <li>Valve seals</li> <li>KF fitting seals</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Lid seals</li> <li>Gas inlet seals</li> <li>Slit valve seals</li> <li>Chamber seals</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional plasma resistance in oxygen &amp; fluorine environments</li> <li>Minimal particulation &amp; surface degradation</li> <li>High purity, very low metallic ion content</li> </ul>	-20°C to 260°C (-4°F to 500°F)	–
Clean-Deposition	547	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Lid seals</li> <li>Endpoint windows</li> <li>Gas inlet/outlet seals</li> <li>Chamber seals</li> <li>Valve seals</li> <li>Slit valve seals</li> <li>Isolation valve seals</li> <li>Gasket seals</li> <li>Dispersing seals</li> <li>Regulator seals</li> <li>Filler seals</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional plasma resistance in fluorine environments</li> <li>Minimal particulation &amp; surface degradation</li> <li>High purity, very low metallic ion content</li> <li>Excellent compression set for repeated use</li> </ul>	Max service temperature: 300°C (572°F)	–
	XRZ	Semiconductor	NF <sub>3</sub> plasma cleaning equipment seals: <ul style="list-style-type: none"> <li>Chamber seals</li> <li>Endpoint windows</li> <li>Gas inlet/outlet seals</li> <li>Gate valve seals</li> <li>Isolator valve seals</li> <li>Reactant delivery system seals</li> <li>Reaction chamber lid seals</li> <li>Slit valve seals</li> </ul>	<ul style="list-style-type: none"> <li>Outstanding plasma resistance in highly corrosive fluorine environments with minimal seal degradation</li> <li>Excellent surface resistance for minimal particulation &amp; sealing integrity</li> <li>High purity for minimal contamination risk</li> <li>Minimal compression set at elevated temps ensures seal integrity</li> <li>Extended equipment uptime with added reliability in dry applications</li> </ul>	Max service temperature: 300°C (572°F)	–

	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
Clean Etch	657	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Endpoint windows</li> <li>Bell jar seals</li> <li>Valve seals</li> <li>KF fitting seals</li> <li>Window seals</li> <li>Isolator valve seals</li> <li>Lid seals</li> <li>Gas Inlet seals</li> <li>Slit valve seals</li> <li>Chamber seals</li> </ul>	<ul style="list-style-type: none"> <li>Excellent plasma resistance in a variety of aggressive chemical environments</li> <li>Minimal particulation</li> <li>Withstands high service temps up to 280°C (536°F) with excursions to 300°C (572°F)</li> </ul>	-18°C to 324°C (0°F to 615°F)	–
	E38	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Bonded gate seals</li> <li>Chamber seals</li> </ul>	<ul style="list-style-type: none"> <li>Minimal contamination</li> <li>Withstands a variety of aggressive chemicals</li> <li>Excellent physical properties</li> <li>Low metal ion content</li> <li>Unlimited design flexibility</li> </ul>	-20°C to 260°C (-4°F to 500°F)	–
	XPE-HP	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Chamber and slit valve seals</li> <li>Endpoint windows</li> <li>Gas inlet/outlet seals</li> <li>Gate and isolator valve seals</li> <li>Reactant delivery system seals</li> <li>Reaction chamber lid seals</li> </ul>	<ul style="list-style-type: none"> <li>High UV &amp; ozone resistance enables next generation process technology insertions</li> <li>Superior O<sub>2</sub> plasma resistance results in improved product integrity</li> <li>High-temp capability</li> <li>Reduced erosion &amp; particulation</li> <li>Decreased maintenance &amp; replacement requirements</li> <li>Excellent compression set</li> </ul>	Max service temperature: 255°C (491°F)	<ul style="list-style-type: none"> <li>O<sub>2</sub> plasma</li> <li>Ozone</li> <li>Fluorine-based plasmas</li> </ul>
	XPE	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Chamber &amp; slit valve seals</li> <li>Endpoint windows</li> <li>Gas inlet/outlet seals</li> <li>Gate and isolator valve seals</li> <li>Reactant delivery system seals</li> <li>Reaction chamber lid seals</li> </ul>	<ul style="list-style-type: none"> <li>High-temperature capability enables future technology &amp; next generation applications</li> <li>Superior O<sub>2</sub> plasma resistance resulting in improved product integrity</li> <li>High CF<sub>4</sub> plasma resistance</li> <li>Reduced product weight loss</li> <li>Decreased maintenance &amp; replacement requirements</li> <li>Excellent compression set performance</li> </ul>	Max service temperature: 280°C (536°F)	Fluorine-based plasmas

	Chemraz® Compound	Primary Industry	Suggested Applications	Features & Benefits	Service Temperature Range	Chemical Compatibility
Low Temperature	564 LT	<ul style="list-style-type: none"> <li>Oil &amp; Gas</li> <li>Chemical Processing</li> <li>Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Deepwater drilling tools</li> <li>Subsea equipment</li> <li>Downhole completion tools used in water injection wells</li> </ul>	<ul style="list-style-type: none"> <li>Exceptional performance in extreme low temps</li> <li>Superior resistance to hostile reservoir chemistries</li> <li>Excellent compression set &amp; thermal shock resistance</li> </ul>	-40°C to 230°C (-40°F to 446°F)	–
BSV - Deposition/Etch	656	Semiconductor	Dry wafer processing equipment seals: <ul style="list-style-type: none"> <li>Bonded slit valve gates</li> <li>Chamber seals</li> <li>Window seals</li> <li>Gas inlet seals</li> <li>Lid seals</li> </ul>	<ul style="list-style-type: none"> <li>Excellent plasma resistance</li> <li>Soft material for low sealing forces &amp; tolerance stackups</li> <li>High purity, very low metallic ion content</li> </ul>	-20°C to 232°C (-4°F to 450°F)	–

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## Greene Tweed

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Please consult with a Greene Tweed engineer on which compound will best meet the requirements of your application.

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