RUBBER, PTFE, PLASTIC, SEALS & COMPONENTS

- Molded
- Machined
- Injection Molded
- Extruded
- Stamped
- Bonded
- Ground

Registered
ISO9001/AS9100
DOD Cleared Facility

Solutions for Critical Sealing Environments

- Temperature
- Wear/Friction
- Chemical Resistance
- Purity

- High Pressures
- Vacuum
- Permeability
- Bonding

- Precision Tolerances
- Conductivity
- EMI/RFI/ESD Shielding
- Leakage

800-576-SEAL
www.SEALSCIENCE.com
# SEAL SCIENCE, INC.

## Aerospace • Defense • Medical • Automotive

### Molded and Bonded Rubber
- Experts with Close Tolerances
- Widest Material selection
- CAD, CNC, EDM Mold Making
- Metal/Plastic/Teflon<sup>(TM)</sup> Substrates
- Injection, Transfer, and Compression Molding
- Material Testing
- Standard and Custom Compounds

### Conductive Elastomers EMI/RFI
- MIL-DTL-83528
- EMI/RFI/ESD Shielding
- 0.2 Ohm-Cm to 40,000,000 Ohm-Cm
- Test Verified Conductivity and Resistivity
- Wide Temperature Range
- Material Experts
- Molded and/or Die Cut Shapes

### Custom Seals
- Micro Sizes to Very Large
- Customer or Seal Science Design
- Multiple Materials Including Metals
- Co-Molding
- Complete Assemblies

### Aircraft Seals
- Bulb Seals
- Door Seals
- Window Seals
- Hatch Seals
- Gap Seals
- Engine Seals
- Fire Barrier
- Aerodynamic Seals

### Gaskets and Die Cuts
- Rubber, Plastics, Foams
- Small to Large Sizes
- ESD/RFI Composites
- High Speed Machines
- Rapid Delivery
- Design for Gasket Factor Performance
- Adhesive Backing

### PerFlex<sup>™</sup> Perfluoroelastomers
- Custom Designs
- 600°F+ Applications
- Extreme Purity Materials
- Low Compression-Set
- Resilient/Low Permeability
- Maximum Chemical Resistance
- Standard and Custom Compounding
- Very Competitive

### O-Rings and Backup Rings
- AS568, Metric, JIS
- All Materials and MIL Specifications
- Custom Compounds
- Special Sizes
- Perfluoroelastomers
- Rapid Custom Tooling
- Teflon<sup>(TM)</sup>, Rubber, Urethane, Hytrek<sup>(TM)</sup> Backup Rings

### Liquid Silicone Molding
- Medical/Biomedical Products
- Cleanroom Production
- FDA Grades Material
- USP Class 6
- Flashless Molding
- Economical for High Volumes

---

800-576-SEAL • www.SEALEASEALSCIENCE.com
# SEAL SCIENCE, INC.

## SEMI-CONDUCTOR & INDUSTRIAL APPLICATIONS

### PTFE SEALS
- Spring Seals
- Rod and Piston Seals
- Piston Rings
- Wipers
- Rotary Seals
- Special Designs
- Friction Limiting and Heat Resistant
- Standard and Custom Materials
- Mil Spec and Industrial Sizes

### VACUUM CUPS / PNEUMATICS
- Over 100 Compounds
- Large Inventory
- Standard Sizes
  - 2mm to 170mm
- Specials to 500mm
- Conductive or Non-Staining
- High and Low Temperatures
- Expert Assistance
- Custom Designs

### MOLDED AND MACHINED PLASTICS/TEFLON®
- Temperatures -300°F to 550°F
- Close Tolerances
- Polyimides, PEEK, and others
- Molded and Extruded Teflon® and other Materials
- Screw Machining
- CNC Machining
- Injection Molded PFA and FEP

### DIAPHRAGMS
- Elastomer and Elastomer/Fabric
- Bellows or Flat
- Knowledgeable Assistance
- Severe Environments
- Flexible for Low Resistance
- Bonding/Assembly to Metals and Plastics

### INJECTION MOLDED PLASTICS
- 20-300 Ton Capabilities
- Insert Molding
- Engineered Materials
- Hytron®, Sylmaren®, and Kraton® Included
- Rapid Prototyping
- Nylon, Delrin®, ABS
- Rynite, etc.

### CLOSE TOLERANCE GRINDING
- Tolerances to .001
- Bonding Experts
- Hard/Soft Materials
- Excellent Finish
- Specialized Tooling
- Substrates and Inserts
- Machined In House
- Needle Valve/Valve Applications

### PolyKing™ SEALS AND WEAR RINGS
- Urethane Seals
- Wear Rings
- Abrasion Resistant
- Standard U-Cups
- Fatigue Resistant
- Rubber Compound Seals
- Design and Selection Assistance
- Custom Design Specialists

### MOLDED URETHANES
- Standard Seals
- Custom Shapes
- Low Wear Compounds
- Injection Molded
- Custom Designs
- Bonding
- Rapid Tooling with Inexpensive Mold Inserts

---

800-576-SEAL • www.SEALSCIENCE.com
# Engineered Materials

## Engineered Plastics
- ABS
- Acetal, Delrin®
- Fluoroplastics
- ETFE, Tefzel®, ECTFE, Halar®, CTFE, PVDF, KYNAR®, FEPA
- Nylon, Moly-Filled
- Polycarbonate
- Polyetheretherketone, PEEK
- Polyetherketone, PEK
- Polyethylene, HDPE, UHMW
- Polyimides, Vespa®
- Polyolefin
- Polypheylene Oxide, PPO
- Polypheylene Sulfide, PPS, Ryton®
- Polypropylene
- Polystyrene
- Polyvinyl Chloride, PVC
- PTFE, glass, moly, bronze, mineral, and Others

## Rubbers (Elastomers)
- Atlas
- Butyl
- Chloroprene
- Conductive Rubbers, Verified Resistivity
- Ethylene Propylene, EPDM
- Fluorocarbon
- Fluoroclastomers, Viton®, Fluoroelastomers
- Isoprene
- Nitriles, Lubricated and High Strength
- PerFlex™, Perfluoroclastomers
- Silicones

## Fabrics
- Glass
- Kevlar®, Nomex®, Aramid, Twaron®
- Nylon
- PBI
- Polyester

## Thermoplastic Elastomers, TPE's and TPR's
- Ethylene Propylene
- Hytrel®, Polyurethane
- Polyetheresters
- Polyolefins
- Santoprene®, Silcones
- Styrenes
- Urethanes, Polyurethanes

## Metals
- Alloy Steels
- Aluminum
- Brasses and Copper
- Hastalloy
- Magnesium Castings
- Speciality Steels, Eligiloy®, Stainless Steels
- Titanium

### Temperature Conversion Table

<table>
<thead>
<tr>
<th>°C</th>
<th>°F</th>
<th>°C</th>
<th>°F</th>
<th>°C</th>
<th>°F</th>
<th>°C</th>
<th>°F</th>
<th>°C</th>
<th>°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>-273</td>
<td>-459.4</td>
<td>-20</td>
<td>-4</td>
<td>80</td>
<td>176.0</td>
<td>190</td>
<td>374</td>
<td>360</td>
<td>680</td>
</tr>
<tr>
<td>-200</td>
<td>-328</td>
<td>0</td>
<td>+32</td>
<td>85</td>
<td>185.0</td>
<td>200</td>
<td>392</td>
<td>370</td>
<td>698</td>
</tr>
<tr>
<td>-220</td>
<td>-364</td>
<td>1</td>
<td>+33.8</td>
<td>90</td>
<td>194.0</td>
<td>204</td>
<td>400</td>
<td>380</td>
<td>716</td>
</tr>
<tr>
<td>-200</td>
<td>-328</td>
<td>5</td>
<td>+41.0</td>
<td>95</td>
<td>203.0</td>
<td>210</td>
<td>410</td>
<td>390</td>
<td>734</td>
</tr>
<tr>
<td>-180</td>
<td>-292</td>
<td>10</td>
<td>+50.0</td>
<td>100</td>
<td>212.0</td>
<td>220</td>
<td>428</td>
<td>400</td>
<td>752</td>
</tr>
<tr>
<td>-160</td>
<td>-256</td>
<td>15</td>
<td>+59.0</td>
<td>107</td>
<td>225.0</td>
<td>230</td>
<td>446</td>
<td>410</td>
<td>770</td>
</tr>
<tr>
<td>-140</td>
<td>-220</td>
<td>20</td>
<td>+68.0</td>
<td>110</td>
<td>230.0</td>
<td>232</td>
<td>450</td>
<td>420</td>
<td>786</td>
</tr>
<tr>
<td>-120</td>
<td>-184</td>
<td>23</td>
<td>+73.4</td>
<td>120</td>
<td>240.0</td>
<td>240</td>
<td>464</td>
<td>430</td>
<td>806</td>
</tr>
<tr>
<td>-100</td>
<td>-148</td>
<td>25</td>
<td>+77.0</td>
<td>121</td>
<td>250.0</td>
<td>250</td>
<td>482</td>
<td>440</td>
<td>824</td>
</tr>
<tr>
<td>-90</td>
<td>-130</td>
<td>30</td>
<td>+86.0</td>
<td>130</td>
<td>260.0</td>
<td>260</td>
<td>498</td>
<td>450</td>
<td>842</td>
</tr>
<tr>
<td>-80</td>
<td>-112</td>
<td>35</td>
<td>+96.0</td>
<td>135</td>
<td>275.0</td>
<td>270</td>
<td>518</td>
<td>460</td>
<td>860</td>
</tr>
<tr>
<td>-70</td>
<td>-94</td>
<td>40</td>
<td>+104.0</td>
<td>140</td>
<td>284.0</td>
<td>280</td>
<td>536</td>
<td>470</td>
<td>878</td>
</tr>
<tr>
<td>-60</td>
<td>-76</td>
<td>45</td>
<td>+113.0</td>
<td>145</td>
<td>295.0</td>
<td>290</td>
<td>554</td>
<td>480</td>
<td>896</td>
</tr>
<tr>
<td>-50</td>
<td>-58</td>
<td>50</td>
<td>+122.0</td>
<td>150</td>
<td>302.0</td>
<td>300</td>
<td>572</td>
<td>490</td>
<td>914</td>
</tr>
<tr>
<td>-40</td>
<td>-40</td>
<td>55</td>
<td>+131.0</td>
<td>160</td>
<td>308.0</td>
<td>310</td>
<td>590</td>
<td>500</td>
<td>932</td>
</tr>
<tr>
<td>-30</td>
<td>-22</td>
<td>65</td>
<td>+149.0</td>
<td>170</td>
<td>318.0</td>
<td>320</td>
<td>608</td>
<td>510</td>
<td>950</td>
</tr>
<tr>
<td>-20</td>
<td>-20</td>
<td>75</td>
<td>+167.0</td>
<td>180</td>
<td>338.0</td>
<td>330</td>
<td>625</td>
<td>520</td>
<td>968</td>
</tr>
</tbody>
</table>

---

**West Coast Office:**
Seal Science, Inc.
17131 Daimler St., Irvine, CA 92614-5508
TEL: (949) 253-3130 • FAX: (949) 253-3141
E-MAIL: info@sealscience.com

**East Coast Office:**
Seal Science, Inc.
1160 Win Drive, Bethlehem, PA 18017-7059
TEL: (610) 868-2800 • FAX: (610) 868-2144

Visit our website at www.sealscience.com

© 2007 Seal Science, Inc. All rights reserved.