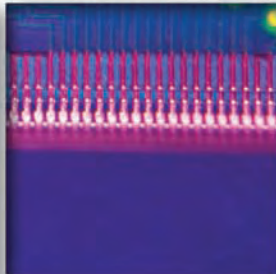
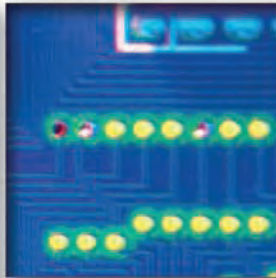




Creative Partners in a Material World

Engineering Materials Selection Guide



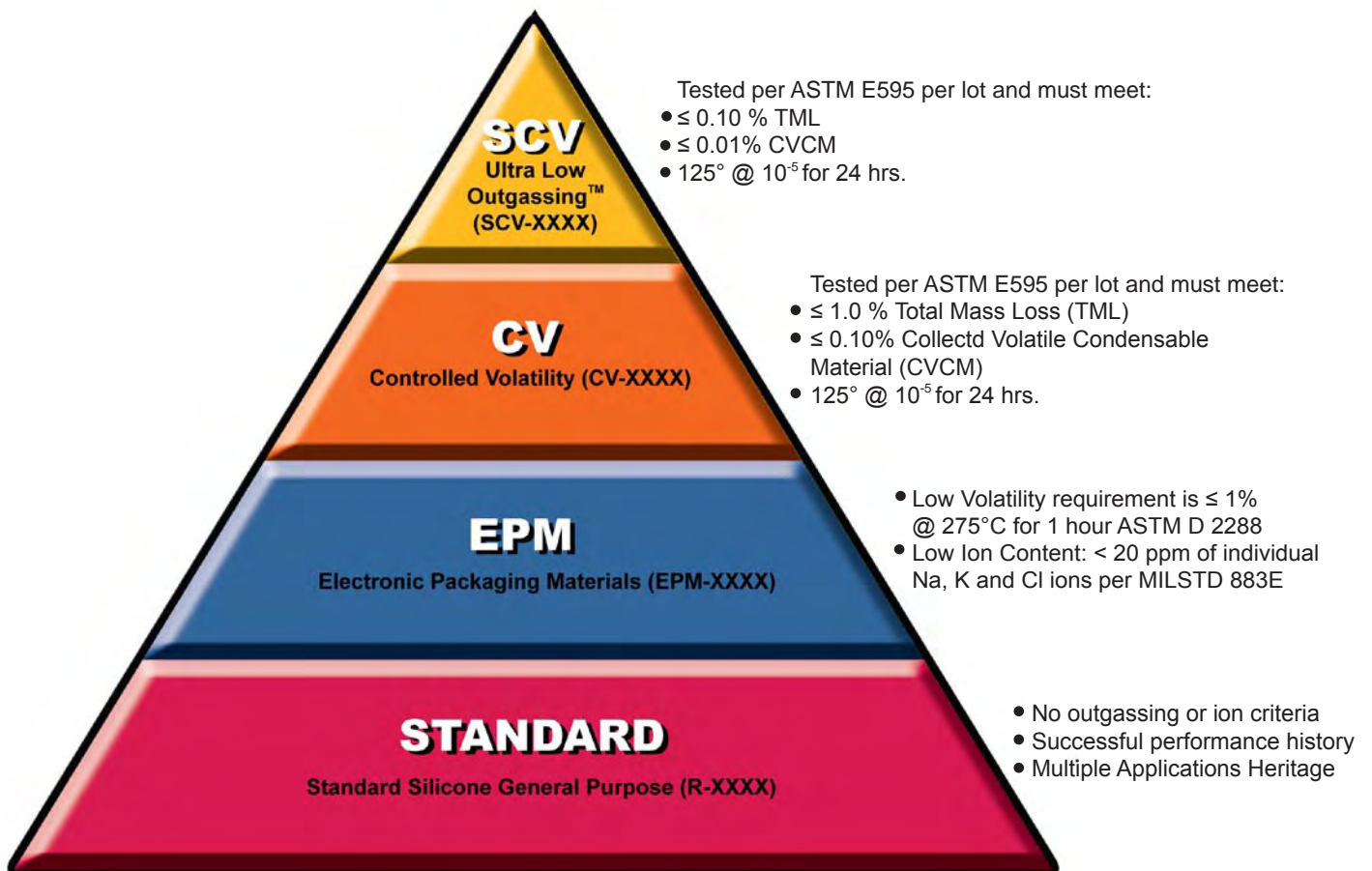
NuSil Technology is a global leader in the formulation and manufacture of silicones for the engineering industry, offering precise and predictable material performance. As an independent, international organization of scientists and professionals, NuSil builds its reputation and customers' success on silicone technology.

ISO 9001-certified since 1994 and AS 9100-certified since 2008, NuSil operates state-of-the-art laboratories and processing facilities in North America, providing on-site, in-person application engineering support worldwide.

What differentiates NuSil Technology from other silicone suppliers is its commitment to provide a full range of silicone materials to meet many diverse requirements. Today, NuSil Technology employs hundreds of research, manufacturing and engineering professionals perfecting silicones as materials of choice based on the vast, unique array of properties they provide.

Low Volatility Silicones

NuSil Technology offers a diverse product line of silicones based on the specification requirements of your application. We can vary the degree of processing needed to meet the desired levels for common contaminants such as ions and low molecular weight species associated with outgassing. The levels of processing are shown in the pyramid below from the bottom, Standard Level, having no outgassing criteria to the top SCV Level being tested per ASTM E595 meeting ≤ 0.10 % TML and ≤ 0.01 % CVCM. All levels in between vary in testing for outgassing requirements.



Engineering Materials

NuSil Technology's silicones are based on advanced polysiloxane polymers. Our Engineering materials offer a solution to many of the difficulties faced by today's engineering and design professionals. They have found acceptance in myriad applications that span a broad variety of industries.

NuSil's silicone materials include:

- Potting compounds
- Encapsulants
- Gels
- Non-reactive fluids and greases
- High elongation elastomers
- Hard resins
- Adhesives and sealants
- Coatings
- Foams
- Thermally and electrically conductive adhesives and sealants
- Functional and non-functional polymers
- Gap Fillers

Many have come to rely on NuSil for high quality and high performance silicone materials.

Aircraft Materials



NuSil's ice-phobic silicone coatings can significantly reduce ice adhesion when applied to aerodynamic surfaces. Fluorosilicones can provide protection against fuel and can also incorporate functional fillers for use as gap fillers, coatings, molded parts, repair butters, or for other applications and they can also be calendared into sheets or ribbons. Electrically conductive additives can also be incorporated in NuSil's silicones which can provide protection against static accumulation and discharge that can damage sensitive electronic components.

Controlled Volatility Materials

Silicones have the ability to maintain elasticity and low modulus over a broad temperature range, providing excellent utility in space. The National Aeronautics and Space Agency (NASA) and the European Space Agency (ESA) require material to be tested per ASTM E 595 prior to use in space. NuSil Technology's Controlled Volatility (CV) Materials meet these requirements and its Ultra Low Outgassing™ Materials (SCV) exceed them by one order of magnitude.

Lightspan Materials

From LEDs to fiber optics, NuSil Technology's Lightspan™ brand product line delivers custom silicone formulations and the most comprehensive line of high-refractive index matching adhesives, encapsulants and thermosets available. NuSil also offers testing services for optical materials characterization, including UV-Vis-NIR spectrophotometric transmission and refractive index vs. wavelength and temperature.



Low Contamination Materials for Electronics

As a low stress alternative for electronic packaging, NuSil Technology's silicones allow the designer to choose from a unique line of silicones for various levels of packaging. We have an extensive line of encapsulants, adhesives and greases. These include thermally and electrically conductive silicones for Thermal Interface Materials (TIM) or for EMI and RFI shielding applications respectively. The degree of processing of the silicones are specified to meet the desired levels of common contaminants such as ions and low molecular weight species associated with outgassing.



| General Purpose | NuSil Product Number | Comments | Cure System | Work Time | Tack Free Time | Cure Time / Temp °C | Specific Gravity | Durometer Type A | Tensile psi (MPa) | Elongation % | Tear ppi (kN/m) | Lap Shear psi (MPa) | Dielectric Strength V/mil | Flow (Inches) Viscosity (cP/mPa·sec) Extrusion (g/min) | Mix Ratio | Color | |
|---|------------------------------------|--|---|-----------|----------------|---------------------|------------------|------------------|-------------------|--------------|-----------------|---------------------|---------------------------|--|---------------------------|---------|-------|
| Properties listed are typical - Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations. | | | | | | | | | | | | | | | | | |
| COATINGS | R-1009 | Dispersion Coating / Conformal, 32% Solids | Oxime | - | 90 m | 7 d / R.T., H | 1.10 | 45 | 1,150 (7.9) | 650 | 95 (16.8) | - | - | 6,150 | - | Trans | |
| | R-1082 | Dispersion Coating / Conformal, 20% Solids | Acetoxy | - | - | 5 d / R.T., H | 1.09 | 25 | 1,425 (9.8) | 950 | 125 (22.0) | - | - | 700 | - | Trans | |
| | R3-1075 | Dispersion Coating / Conformal, 60% Solids | Oxime | - | 80 m | 7 d / R.T., H | 1.06 | 40 | 700 (4.8) | 350 | 40 (7.1) | - | 1,250 | 3,300 | - | Trans | |
| | R-1182 | Low CoF, Non-blocking | Platinum | - | - | - | - | - | - | - | - | - | - | - | - | Trans | |
| | R-2180 | Cure: 30 M / 25 °C : 45 M / 75 °C : 135 M / 150 °C, Ice Phobic, 20% Solids | Platinum | >72 h | - | See Comments | - | 40 | 1,700 (11.7) | 1,050 | 300 (52.9) | - | - | 3,075 | 1:1 | Trans | |
| | R-2180-2 | Cure: 30 M / 25 °C : 45 M / 75 °C : 135 M / 150 °C, Ice Phobic, 20% Solids | Platinum | - | - | See Comments | - | 45 | 1,650 (11.4) | 1,000 | 300 (52.9) | - | - | 3,275 | 1:1 | Black | |
| | R-2182 | Cure: 5 m / R.T., H : 5 m / 150 | Platinum | >24 h | - | See Comments | 0.96 | - | - | - | - | - | - | Zahn Cup, Cup #2, 15 sec | 1:1 | Trans | |
| | R-2183 | Cure: 30 M / R.T., H : 45 M / 75 °C : 135 M / 150 °C | Platinum | - | - | See Comments | - | 35 | 1,550 (10.7) | 800 | 175 (30.9) | - | - | 850 | 1:1 | Trans | |
| CF19-2615 | Solventless | Platinum | 4 h | - | 30 m / 150 | - | 30 | 120 (0.9) | 100 | - | - | 500 | A:1,300 / B:800 | 1:1 | Clear | | |
| ADHESIVES & SEALANTS | ONE PART | R-1130 | Adhesive, Non-slump | Oxime | - | 25 m | 7 d / R.T., H | 1.10 | 35 | 850 (5.9) | 325 | 40 (7.1) | ¹⁾ 485 (3.6) | - | 0.5 Inches | - | Trans |
| | | R-1140 | Adhesive, Non-slump | Acetoxy | - | 7 m | 72 h / R.T., H | 1.08 | 30 | 700 (4.8) | 350 | 40 (7.0) | ¹⁾ 625 (4.3) | - | 1.5 Inches | - | Trans |
| | | R2-1140 | Adhesive, Self-leveling | Acetoxy | - | 9 m | 7 d / R.T., H | 1.03 | 23 | 250 (1.7) | 350 | 20 (3.5) | ¹⁾ 235 (1.6) | - | 3 Inches | - | Trans |
| | | R4-1140 | Adhesive | Acetoxy | - | 10 m | 72 h / R.T., H | 1.12 | 25 | 1,400 (9.7) | 750 | 100 (17.6) | - | - | 2 inches | - | Trans |
| | | R-1400 | Low Durometer, Non Flowable, Glob Top | Platinum | - | - | 15 m / 200 | 1.18 | 19 | 825 (5.7) | 750 | 110 (19.4) | - | 400 | 400,000 | - | Black |
| | | R-1600 | Low / High Temperature, Encapsulant ‡ | Oxime | - | 30 m | 7 d / R.T., H | 1.10 | 45 | 650 (4.5) | 300 | 60 (11.4) | ¹⁾ 205 (1.4) | - | Non-slump | - | Clear |
| | TWO PART | R-2140 | High Tear | Platinum | 4 h | - | 5 m / 177 | 1.09 | 40 | 850 (5.9) | 320 | 150 (25.5) | - | - | A:120,000 / B:270 | 10:1 | Gray |
| | | R-2145 | Extremely Tough, Fast Cure Elastomer | Platinum | 15 m | - | 2 h / 65 | 1.17 | 45 | 1,050 (7.2) | 400 | 150 (26.5) | ²⁾ 600 (4.1) | 825 | A:310 g/min / B:280 g/min | 1:1 | Gray |
| | | R1-2145 | Longer Work Time, Young's Modulus 300 psi (2.1 MPa) | Platinum | 60 m | - | 2 h / 65 | 1.16 | 45 | 1,000 (6.9) | 400 | 190 (33.5) | ²⁾ 625 (4.3) | 825 | A:280 g/min / B:290 g/min | 1:1 | Gray |
| | | R-2160 | High Temperature Elastomer ‡ | Platinum | 50 m | - | 30 m / 150 | 1.20 | 20 | 750 (5.2) | 625 | 150 (25.5) | - | 500 | A:250,000 / B:650 | 10:1 | Red |
| | | R3-2160 | Longer Work Time, High Temp Elastomer | Platinum | 72 h | - | 15 m / 150 | 1.17 | 35 | 475 (3.3) | 475 | 125 (22.0) | ³⁾ 200 (1.4) | - | 12 g/min | 1:1 | Red |
| | | CF15-2186 | Short Work Time, Quick Cure Elastomer | Platinum | 1 m | - | 24 h / R.T., H | - | 25 | 1,200 (8.3) | 625 | 100 (17.6) | - | 500 | A: 80,000 / B: 50,000 | 1:1 | Trans |
| | | CF19-2186 | Longer Work Time, Low Durometer | Platinum | 15 m | - | 30 m / 150 | 1.11 | 25 | 1,100 (7.6) | 600 | 80 (14.1) | ²⁾ 330 (2.3) | 730 | A:80,000 / B:65,000 | 1:1 | Trans |
| | | R-2186 | All Purpose, High Tear Elastomer | Platinum | 2.5 h | - | 15 m / 150 | 1.12 | 30 | 1,050 (7.2) | 450 | 100 (17.6) | ²⁾ 475 (3.3) | 640 | A:83,000 | 10:1 | Trans |
| | | R-2186-2 | All Purpose, High Tear Elastomer | Platinum | 3 h | - | 15 m / 150 | 1.15 | 35 | 1,050 (7.2) | 450 | 100 (17.6) | - | 500 | A:85,000 | 10:1 | Black |
| | | R28-2186 | Non-slump | Platinum | 6 m | 3.5 h | 30 m / 150 | 1.12 | 25 | 1,150 (7.9) | 650 | 75 (13.2) | - | 730 | A:0.02 Inches | 1:1 | Trans |
| | | R31-2186 | Flowable, Fast Cure Adhesive | Platinum | 15 m | - | 24 h / R.T., H | 1.12 | 20 | 1,000 (6.9) | 775 | 125 (21.2) | 110 (0.76) | 905 | A:82,000 / B:Thixotropic | 1:1 | Trans |
| | | R32-2186 | Flowable, Fast Cure Adhesive, Longer Work Time | Platinum | 15 h | - | 15 m / 150 | 1.12 | 15 | 975 (6.7) | 850 | 125 (21.2) | 150 (1.0) | 905 | A:80,000 / B:Thixotropic | 1:1 | Trans |
| | | R33-2186 | Flowable, Longer Work Time, Adhesive | Platinum | 2 h | - | 24 h / R.T., H | 1.12 | 20 | 1,000 (6.9) | 725 | 150 (26.5) | - | - | A:83,500 | 1:1 | Trans |
| | | R34-2186 | Fast Cure Adhesive | Platinum | 18 h | - | 15 m / 120 | 1.09 | 48 | 830 (5.7) | 340 | 70 (12.3) | - | - | 9.0 g/min | 1:1 | Trans |
| | | CF1-6755 | Tough Elastomer ‡ | Platinum | 2 h | - | 30 m / 150 | 1.14 | 30 | 675 (4.7) | 275 | 40 (7.1) | - | - | A:40,000 / B:35,000 | 1:1 | Clear |
| | | R-2185 | Flowable, Light-weight Elastomer | Platinum | 1 h | - | 30m/150 | 0.96 | 40 | 500 (3.4) | 280 | 65 (11.5) | - | - | A:96,000 | 10:1 | White |
| | | CF2-2186 | Medium Viscosity, All Purpose Potting & Encapsulant | Platinum | 2 h | - | 10 m / 150 | 1.10 | 20 | 900 (6.2) | 600 | 70 (12.3) | - | 500 | A: 38,000 / B: 18,000 | 10:1 | Trans |
| | | CF16-2186 | Medium work time, Quick Cure Elastomer | Platinum | 15 m | - | 60 m / 100 | 1.12 | 30 | 1,175 (8.1) | 550 | 80 (14.1) | - | 900 | A:70,000 | 10:1 | Trans |
| | | CF20-2186 | Longer Work Time | Platinum | 3 h | - | 60 m / 100 | 1.10 | 30 | 1,100 (7.6) | 600 | 80 (14.1) | - | 900 | A:80,000 / B: 50,000 | 1:1 | Trans |
| | | R-2188 | High Power Electronics | Platinum | 14 h | - | 30 m / 150 | 1.05 | 20 | 475 (3.3) | 350 | - | - | 450 | A: 13,500 / B: 9,000 | 1:1 | Trans |
| | | R-2550 | Low Viscosity, All-purpose, Tough Elastomer ‡ | Alkoxy | 6 h | 24 h | 7 d / R.T., H | 1.08 | 35 | 500 (3.5) | 175 | 20 (3.5) | - | - | 9,000 | 100:0.5 | Trans |
| | | R-2560 | Low/High Temperature, Flowable | Alkoxy | 1 h | - | 7 d / R.T., H | 1.41 | 55 | 700 (4.8) | 125 | - | 385 (2.7) | - | 31,000 | 100:0.5 | Red |
| | | R-2588 | Low/High Temperature, Good Adhesion | Alkoxy | - | 12 h | 7 d / R.T., H | 1.44 | 65 | 750 (5.2) | 95 | - | 675 (4.7) | - | 825,000 | 100:3.8 | Red |
| | | R-2615 | High Durometer | Platinum | 4 h | - | 15 m / 150 | 1.03 | 50 | 1,300 (9.0) | 100 | 20 (3.5) | - | 500 | A:6,000 / B:90 | 10:1 | Clear |
| | | R-2615-3 | Low Viscosity | Platinum | 2 h | - | 30 m / 150 | 1.06 | 50 | 1,000 (6.9) | 100 | - | - | 830 | A:6000 B:2500 | 1:1 | Red |
| | | R21-2615 | Post Cure Durometer Type A 80 | Platinum | 24 h | - | 30 m / 150 | - | 80 | 950 (6.6) | 55 | 50 (8.8) | - | - | A:27,500 / B:25,000 | 1:1 | Clear |
| | | R-2620 | Low viscosity, High Durometer, Quartz Filled ‡ | Platinum | 6 m | - | 10 m / 150 | 1.22 | 55 | 1,200 (8.3) | 95 | - | - | 500 | 9,000 | 10:1 | Tan |
| | | R-2652 | Low Durometer - Type '00' 65 | Platinum | 10 m | - | 60 m / 100 | 1.01 | See Comments | 50 (0.34) | 130 | - | - | 500 | 4,500 | 10:1 | Clear |
| R-2655 | Low / High Temperature Elastomer ‡ | Platinum | 5 h | - | 60 m / 100 | 1.03 | 40 | 900 (6.2) | 120 | - | - | - | 5,400 | 10:1 | Clear | | |
| THREE PART | R2-6755 | Better Adhesion to Polycarbonate ‡ | Platinum | - | - | 30 m / 150 | 1.14 | 20 | 550 (3.79) | 325 | 25 (4.4) | - | - | A:48,500 / B:40,000 / C:1,350 | 1:1:0.1 | Trans | |
| LIQUID SILICONE RUBBERS (LSR) | LSR-5805 | Liquid Injection Molding, Low Durometer | Platinum | >72 h | - | 5 m / 150 | 1.08 | 11 | 450 (3.1) | 1,050 | 60 (10.6) | - | - | 50 g/min | 1:1 | Trans | |
| | LSR-5810 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.07 | 15 | 750 (5.2) | 1,075 | 70 (12.3) | - | - | A:80 g/min / B: 110 g/min | 1:1 | Trans | |
| | LSR-5815 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.10 | 20 | 1,000 (6.9) | 1,000 | 125 (22.0) | - | - | A:45 g/min / B:65 g/min | 1:1 | Trans | |
| | LSR-5820 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.14 | 30 | 900 (6.2) | 850 | 125 (22.0) | - | - | A:40g/min / B:50 g/min | 1:1 | Trans | |
| | LSR-5830 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.43 | 40 | 1,250 (8.6) | 750 | 140 (24.7) | - | - | A:100 g/min / B:120 g/min | 1:1 | Trans | |
| | LSR-5840 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.12 | 50 | 1,100 (7.6) | 550 | 250 (44.1) | - | - | A:160 g/min / B:300 g/min | 1:1 | Trans | |
| | LSR-5850 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 150 | 1.15 | 60 | 1,400 (9.7) | 660 | 235 (40.6) | - | - | A:45 g/min / B: 75 g/min | 1:1 | Trans | |
| | LSR-5860 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 165 | 1.16 | 70 | 1,300 (9.0) | 525 | 260 (45.9) | - | - | A:45 g/min / B:110 g/min | 1:1 | Trans | |
| | LSR-5870 | Liquid Injection Molding | Platinum | >72 h | - | 5 m / 165 | 1.16 | 80 | 1,350 (9.3) | 400 | 225 (35.2) | - | - | A:25 g/min / B:70 g/min | 1:1 | Trans | |
| | LSR-5880 | Liquid Injection Molding, High Durometer | Platinum | >72 h | - | 5 m / 165 | 1.20 | 65 | 950 (6.6) | 250 | 85 (15.0) | - | - | A:25 g/min / B:110 g/min | 1:1 | Trans | |
| MOLD MAKING | R-2200-11 | Casting, Creating Molds | Platinum | >2.5 h | - | 30 / 150 | 1.24 | - | 800 (5.5) | 135 | 100 (17.6) | - | - | A:140,000 / B:3,000 | 10:1 | Gray | |
| GELS | GEL-8100 | Medium GEL, Penetration 10 mm | Platinum | > 24 h | - | 60 m / 100 | 0.97 | - | - | - | - | - | 500 | 525 | 1:1 | Clear | |
| | GEL-8150 | Firm GEL, Penetration 0.4 mm, Longer Work Time | Platinum | 4 h | - | 30 m / 100 | 0.97 | - | - | - | - | - | 500 | 500 | 1:1 | Trans | |
| | GEL1-8155 | Firm GEL, Penetration 5 mm | Platinum | - | - | 30 m / 150 | - | - | - | - | - | - | - | 14,500 | 1:1 | Clear | |
| | GEL-8170 | High Purity, Volume Resistivity 1x10 ¹⁵ ohm-cm | Platinum | - | - | 90 m / 80 | 0.97 | - | - | - | - | - | 500 | 600 | 1:1 | Trans | |
| | GEL-8250 | Low / High Temperature, Penetration 0.5 mm ‡ | Platinum | 2 h | - | 30 m / 100 | - | - | - | - | - | - | 500 | 650 | 1:1 | Clear | |

‡= Designed for Broad Operating Temperatures

d = day
h = hour
m = minutes

R.T. = Room Temperature
H = Humidity

Version uploaded 09/07/2015

¹⁾ Primed with SP-120
²⁾ Primed with CF1-135
³⁾ Primed with SP-270

g/min = Grams Per Minute Trans = Translucent

ENGINEERING MATERIALS

| General Purpose | NuSil Product Number | Comments | Cure System | Work Time | Tack Free Time | Cure Time / Temp °C | Specific Gravity | Durometer Type A | Tensile psi (MPa) | Elongation % | Tear ppi (kN/m) | Lap Shear psi (MPa) | Dielectric Strength V/mil | Flow (Inches) Viscosity (cP/mPa-sec) Extrusion (g/min) | Mix Ratio | Color |
|---|--|---|-------------|-----------|----------------|---------------------|------------------|------------------|-------------------|--------------|-----------------|-------------------------|---------------------------|--|-----------|-----------|
| Properties listed are typical - Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations. | | | | | | | | | | | | | | | | |
| SILICONE FOAMS | SFM5-2350 | Flame Resistant, 25 lb/ft ³ (0.400 g/cm ³) | Platinum | 23 m | - | 45 m / 100 | 0.35 | - | - | - | - | - | 190 | A:55,000 / B:50,000 | 1:1 | Gray |
| | R1-2354 | High Strength, Soft, 40 lb/ft ³ (0.640 g/cm ³) | Platinum | - | - | 10 m / R.T. | 0.45 | - | 100 (.069) | - | - | - | - | - | 1:1 | Trans |
| | R-2356 | Flame Resistant, 28 lb/ft ³ (0.450 g/cm ³) | Platinum | - | - | 15 m / R.T. | 0.35 | - | - | - | - | - | 190 | A:4,100 / B:5,300 | 1:1 | Gray |
| | R-2370 | Low Density, Soft, 10 lb/ft ³ (0.16 g/cm ³) | Alkoxy | - | - | 10 m / R.T., H | - | - | - | - | - | - | - | 4,700 | 100:6 | Tan |
| | R-2380 | Medium Density, Soft, 19 lb/ft ³ (0.31 g/cm ³) | Alkoxy | - | - | 10 m / R.T., H | 0.34 | - | - | - | - | - | - | 3,600 | 100:6 | Tan |
| ELECTRICALLY CONDUCTIVE | R-1505 | 8 ohm-cm. Static Dissipation ‡ | Oxime | - | 10 m | 7 d / R.T., H | 1.23 | 75 | 525 (3.6) | 25 | - | - | 10 | Non-slump | 1 Part | Black |
| | R-2630 | 7 ohm-cm, Low viscosity | Platinum | 11 h | - | 30 m / 150 | 1.10 | 60 | 700 (4.8) | 90 | 35 (6.2) | - | 10 | 20,000 | 10:1 | Black |
| | R-2631 | 50 ohm-cm, Low Durometer, Tough | Platinum | 8 h | - | 60 m / 65 | 1.07 | 40 | 600 (4.5) | 275 | 50 (8.8) | - | - | 100 g/min | 1:1 | Black |
| | R-2634 | 0.001 ohm-cm, Low / High Temperature ‡ | Alkoxy | 3 h | - | 7 d / R.T., H | 3.36 | 80 | 250 (1.7) | 90 | 50 (8.8) | 195 (1.3) | - | 90 g/min | 100:0.5 | Tan |
| | R-2637 | 0.006 ohm-cm | Platinum | 4 h | - | 30 m / 150 | 3.60 | 60 | 210 (2.1) | 275 | - | - | 5 | Paste | 20:1 | Tan |
| THERMALLY CONDUCTIVE | R-2930 | ²²⁾ 1.46 W/m-K | Platinum | 3 h | - | 30 m / 150 | 1.55 | 80 | 260 (1.72) | 20 | - | - | 880 | Paste | 15:1 | White |
| | R-2939 | ²²⁾ 0.75 W/m-K | Platinum | 4 h | - | 30 m / 150 | 1.34 | 70 | 300 (2.1) | 70 | 45 (7.9) | - | 810 | A:70,000 | 15:1 | White |
| | R-2940 | ²²⁾ 0.84 W/m-K, High Durometer | Platinum | 5 h | 24 h | 30 m / 150 | 2.41 | 90 | 700 (4.8) | 35 | 65 (11.5) | - | 450 | Paste | 20:1 | Gray |
| | R-2949 | ²²⁾ 0.75 W/m-K, Low / High Temperature ‡ | Platinum | 3.5 h | - | 30 m / 150 | - | 75 | 275 (1.9) | 50 | 45 (7.9) | - | 920 | A:75,000 | 15:1 | White |
| FLUOROSILICONES | GEL-3500 | Fuel Resistant Gel, Durometer -Type '00' 50 | Platinum | 12 h | - | 45 m / 150 | - | See comments | - | - | - | - | - | A:12,000 / B:10,500 | 1:1 | Trans |
| | CF1-3510 | Fuel / Solvent Resistant | Platinum | 7 h | - | 30 m / 150 | 1.44 | 20 | 185 (1.2) | 135 | - | - | - | A:70,000 / B:10 | 10:1 | Red |
| | CF2-3521 | Fast Cure | Platinum | - | - | 30 m / 150 | 1.30 | 35 | 750 (5.2) | 325 | - | - | - | - | 1:1 | Trans |
| | CF2-3521-2 | Fuel Resistant | Platinum | 60 m | - | 48 h / R.T. | 1.28 | 35 | 600 (4.1) | 265 | - | ²⁾ 350 (2.4) | - | Paste | 1:1 | Black |
| | CF3-3521 | Liquid Injection Molding, Fuel Resistant | Platinum | 12 h | - | 30 m / 150 | 1.26 | 30 | 700 (4.8) | 360 | - | - | - | A:90 g/min / B:150 g/min | 1:1 | Trans |
| | CF5-3521-2 | Liquid Injection Molding, Fuel Resistant | Platinum | 3.5 h | - | 48 h / R.T. | 1.30 | 30 | 550 (3.8) | 275 | 35 (6.2) | - | - | 240,000 | 1:1 | Black |
| | R7-3521-11 | Solvent Resistant | Platinum | 60 m | - | 48 h / R.T. | 1.27 | 30 | 500 (3.4) | 260 | 35 (6.2) | - | - | - | 1:1 | Gray |
| | FS-3502-1 | Fuel Resistant white gel | Platinum | - | - | 4 h / 50 | - | 10 | - | - | - | - | - | 1,200 | 1:1 | White |
| | FS-3511 | Liquid Injection Molding Fluorosilicone | Platinum | 24 h | - | 30 m / 150 | 1.39 | 40 | 1,150 (7.9) | 335 | 60 (10.6) | - | - | A:40 g/min / B:35 g/min | 1:1 | Trans |
| | FS-3606 | Fluid, Volume Resistivity 1x10 ¹⁵ ohms-cm | - | - | - | - | - | - | - | - | - | - | 400 | 350, 1,000 and 12,500 | - | Trans |
| | CF1-3710-2 | Fuel / Solvent Resistant Foam, 50 lb/ft ³ (800 Kg/m ³) | Platinum | - | 10 m | 1 to 4 h / R.T. | - | - | - | - | - | - | - | - | 1:1 | Gray |
| | FS-3730 | Available in Gray / Black / Translucent | Acetoxy | - | 30 m | 72 h / R.T., H | 1.40 | 35 | 850 (5.9) | 425 | 60 (10.6) | ²⁾ 380 (2.6) | - | Thixotropic | - | White |
| | FS-3730-11 | Lap Shear after 7 days, ¹⁾ 275 psi (1.9 MPa) | Acetoxy | 1.48 | 15 m | 72 h / R.T., H | 1.48 | 40 | 700 (4.8) | 275 | 50 (8.1) | - | - | Thixotropic | - | Gray |
| | FS3-3730 | Fuel Resistant, 100 m% | Acetoxy | - | 15 m | 72 h / R.T., H | 1.35 | 35 | 850 (5.9) | 400 | 55 (9.7) | - | - | 240 g/min | - | Trans |
| | FS-3775 | High Temperature, Fuel Resistant | Acetoxy | - | 8 m | 72 h / R.T., H | 1.29 | 30 | 450 (3.1) | 400 | 40 (7.1) | - | - | 250 g/min | - | Trans |
| FS-3781 | Extrusion or Compression Molding, Pre-catalyzing | Peroxide | - | - | 30 m / 120 | 1.33 | 30 | 850 (5.9) | 300 | 40 (7.1) | - | - | - | - | 15:1 | White |
| CF1-3800 | ²²⁾ Thermally Conductive 1.25 W/m-K, Fuel Resistant | Platinum | 2 h | - | 30 m / 150 | 1.52 | 50 | 125 (0.86) | 50 | - | - | - | Paste | - | Trans | |
| R-3930 | Dispersion Coating, Sprayable | Acetoxy | - | - | 72 h / R.T., H | 1.36 | 35 | 850 (5.9) | 400 | 50 (8.8) | - | - | - | - | - | Trans |
| R-3975 | High Temperature, Dispersion Coating Sprayable | Acetoxy | - | - | 72 h / R.T., H | 1.29 | 25 | 425 (2.9) | 400 | 35 (6.2) | - | - | 1,625 | - | Trans | |
| INKS | R-1008 | Available in: Translucent, White, Black, Red, Orange, Yellow, Green, Blue, Violet | Oxime | - | 40 m | 7 d / R.T., H | - | 30 | 300 (2.06) | 200 | - | - | - | 1,150 | - | Various |
| | R-2100-2 | Fast Cure | Platinum | - | - | 5 m / 150 | - | - | - | - | - | - | - | A:800 / B:2,850 | 1:1 | Black |
| | R-2100-7 | Fast Cure | Platinum | - | - | 5 m / 150 | - | - | - | - | - | - | - | A:2,100 / B:850 | 1:1 | Blue |
| FLUIDS | S-7200 | Viscosity up to 7 Million cps, Volatility 2% max. | - | - | - | - | 1.00 | - | - | - | - | - | 400 | Up to 7 Million cP | - | Clear |
| | S-7201 | Certified to FED Spec. VV-D-1078 | - | - | - | - | 0.98 | - | - | - | - | - | 400 | 2 Million and 2.5 Million cP | - | Clear |
| | S-7205 | Kinematic Viscosity 0.62 cSt | - | - | - | - | - | - | - | - | - | - | - | - | - | Trans |
| | S-7400 | Low / High Temperature, Volatile Content 4% max. | - | - | - | - | 1.01 | - | - | - | - | - | 400 | 40,000 to 2.5 Million cP | - | Trans |
| | S-7402 | Low/High Temp, Volatile Content 3% Max | - | - | - | - | 1.01 | - | - | - | - | - | - | - | - | Trans |
| GREASES | G-9010 | Stiff Consistency Grease, Volatile Content 0.2% max. | - | - | - | - | 1.14 | - | - | - | - | - | - | 1,100,000 | - | Trans |
| | G-9020 | Volatility 0.3% max. | - | - | - | - | 1.08 | - | - | - | - | - | - | Medium Grease | - | Trans |
| | G-9030 | Stiff Consistency, Volatile Content 0.3% max. | - | - | - | - | 1.11 | - | - | - | - | - | - | 980,000 | - | Gray |
| | G-9040 | Low Viscosity, Volatile Content 0.5% | - | - | - | - | 0.97 | - | - | - | - | - | - | Liquid | - | Clear |
| | G-9200 | Stiff Consistency Grease | - | - | - | - | 1.12 | - | - | - | - | - | - | Heavy Grease | - | Clear |
| | G-9340 | Thermally Conductive | - | - | - | - | 2.26 | - | - | - | - | - | 500 | Medium Grease | - | White |
| PRIMERS | SP-120 | General Purpose, 4.1% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1 | - | Clear |
| | SP-121 | General Purpose, 3.5% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1 | - | Red |
| | SP-124 | Condensation Cure Systems, 9.6% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.78 | - | - | - | - | - | - | 1 | - | Trans |
| | CF1-135 | Addition Cure Systems, 4.5% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1 | - | Clear |
| | CF2-135 | Addition Cure Systems, 4.5% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1 | - | Clear |
| | CF6-135 | Addition Cure Systems, Inhibiting Environments, 8.5% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.78 | - | - | - | - | - | - | 1 | - | Trans |
| | CF1-141 | Addition Cure Systems, Dispersed in IPA, 6% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.80 | - | - | - | - | - | - | 1 | - | Red |
| | SP-142 | Addition Cure Systems, 20% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.80 | - | - | - | - | - | - | 1 | - | Trans |
| | SP-270 | Addition Cure Systems, Difficult Substrates, 15% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1 | - | Trans |
| | SP-271 | Addition Cure Systems, Difficult Substrates, 20% Solids | Hydrolysis | - | - | - | 0.80 | - | - | - | - | - | - | 1 | - | Trans |
| SILICONE RESINS | CF-4721 | 75 Type D with Dicumyl Peroxide Catalyst (Catalyst Not Included) | - | - | - | - | 1.10 | See Comments | - | - | - | - | - | 125 | - | Lt. Amber |
| | CF2-4721 | 75 Type D, Precatalyzed | Peroxide | 30 d | - | 15 m / 150 | 1.09 | 7 | - | - | - | - | - | 130 | - | Lt. Amber |

²²⁾ Tested per ASTM E1530 ‡=Designed for Broad Operating Temperatures

d = day
h = hour
m = minutes
R.T. = Room Temperature
H = Humidity

¹⁾ Primed with SP-120
²⁾ Primed with CF1-135

g/min = Grams Per Minute

Trans = Translucent

CONTROLLED VOLATILITY MATERIALS

| General Purpose | NuSil Product Number | Comments | Cure System | Work Time | Tack Free Time | Cure Time / Temp °C | Specific Gravity | Durometer Type A | Tensile psi (MPa) | Elongation % | Tear ppi (kN/m) | CTE ppm/°C | Dielectric Strength V/mil | Flow (Inches) Viscosity (cP/mPa-sec) Extrusion (g/min) | Mix Ratio | Color |
|--|----------------------------|--|-------------|-----------|----------------|---------------------|------------------|------------------|-------------------|--------------|-----------------|------------|---------------------------|--|-----------|-------|
| Materials are tested in accordance with ASTM E 595 Total Mass Loss (TML) of ≤0.10% and Collected Volatile Condensable Materials (CVCM) of ≤0.01% | | | | | | | | | | | | | | | | |
| Properties listed are typical - Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations. | | | | | | | | | | | | | | | | |
| ULTRA LOW OUTGASSING™ | SCV-2585 | Pourable Elastomer, ⁽⁴⁾ Primed Lap Shear 475 psi (3.3 MPa) ‡ | Platinum | 1 h | - | 15 m / 150 | - | 35 | 700 (4.8) | 300 | 40 (7.1) | - | - | A: 56,000 / B: 43,000 | 1:1 | Trans |
| | SCV-2586 | Fast Cure, Low Density, Primed Lap Shear 175psi | Platinum | 4 h | - | 30 m / 150 | 0.74 | 45 | 225 (1.6) | 150 | - | - | - | A: 375,000 / B: 275,000 | 1:1 | Red |
| | SCV-2590 | Pourable ‡ | Platinum | - | - | 15 m / 150 | 1.02 | 45 | 950 (6.6) | 125 | - | - | - | A:8,000 | 10:1 | Clear |
| | SCV-2590-2 | Low Viscosity, Fast Cure | Platinum | 4.5 h | - | 30 m / 150 | 1.06 | 50 | 950 (6.6) | 150 | - | 370 | 850 | A:9,500 | 10:1 | Black |
| | SCV1-2590 | ⁽⁴⁾ Primed Lap Shear 175 psi (1.2 MPa) | Platinum | 4 h | - | 15 m / 150 | 1.02 | 50 | 925 (6.4) | 90 | - | 400 | - | A:3,800 / B:2,800 | 1:1 | Clear |
| | SCV2-2590 | Low / High Temperature, ⁽⁴⁾ Primed Lap Shear 250 psi (1.7 MPa) ‡ | Platinum | - | - | 4 h / 65 | 1.04 | 45 | 475 (3.3) | 85 | - | 490 | - | A:3,500 | 10:1 | Clear |
| | SCV-2596 | Electrically Conductive, 2.5 ohm-cm, Carbon Fiber Filled ‡ | Platinum | 2 h | - | 30 m / 150 | 1.19 | 75 | 475 (3.3) | 90 | - | 580 | - | - | 10:1 | Black |
| | SCV1-2596 | Electrically Conductive, 0.005 ohm-cm, ⁽²¹⁾ 1.2 W/m-K | Platinum | 2.5 h | - | 30 m / 150 | 3.42 | 85 | 450 (3.1) | - | - | 215 | - | Paste | 20:1 | Tan |
| | SCV1-2599 | Thermally Conductive, ⁽²²⁾ 1.60 W/m-K | Platinum | 2 h | - | 7 d / R.T. | 1.53 | 75 | 200 (1.4) | 30 | - | 225 | 540 | Paste | 15:1 | White |
| SCV2-2599 | ⁽²²⁾ 0.64 W/m-K | Platinum | 3 h | - | 30 m / 150 | - | 55 | 400 (2.75) | 225 | 55 (9.7) | - | - | 140 g/min | 20:1 | White | |
| Controlled volatility or low out-gassing materials are tested in accordance with ASTM E 595 Total Mass Loss (TML) of ≤1.0% and Collected Volatile Condensable Materials (CVCM) of ≤0.10% | | | | | | | | | | | | | | | | |
| COATINGS | CV-1144-0 | 60% Solids, Atomic Oxygen Protective Overcoat ‡ | Oxime | - | 50 m | 7 d / R.T., H | 1.00 | - | - | - | - | - | - | 240 | - | Clear |
| | CV1-1144-0 | 50% Solids ‡ | Oxime | - | 10 m | 7 d / R.T., H | 1.11 | - | - | - | - | - | - | 850 | - | Clear |
| | CV3-1144-1 | 60% Solids ‡ | Oxime | - | - | 7 d / R.T., H | - | - | - | - | - | - | - | 900 | - | White |
| | CV-1146-2 | 72% Solids ‡ | Oxime | - | 1 h | 7 d / R.T., H | 1.26 | - | - | - | - | - | 845 | 2,400 | - | Black |
| | CV2-1147 | 60% Solids, Non-blocking Overcoat ‡ | Oxime | - | 2 h | 7 d / R.T., H | 1.12 | - | - | - | - | - | - | 2,000 | - | Trans |
| | CV-1148 | 70% Solids ‡ | Oxime | - | 1 h | 7 d / R.T., H | 1.34 | - | - | - | - | - | - | 7,500 | - | Black |
| | CV1-1148 | 40% Solids ‡ | Oxime | - | 40 m | 7 d / R.T., H | 1.07 | - | - | - | - | - | - | 5,000 | - | Black |
| | CV2-1148 | 100% Solids ‡ | Oxime | - | - | 7 d / R.T., H | 1.07 | - | - | - | - | - | - | Non-slump | - | Black |
| | CV-1152 | Protective Overcoat, 100% Solids ‡ | Oxime | - | 50 m | 7 d / R.T., H | 1.01 | - | - | - | - | - | - | 7,300 | - | Clear |
| ONE PART | CV-1142 | Spot Bonding, Available in Black & White ‡ | Oxime | - | 20 m | 7 d / R.T., H | 1.11 | 45 | 700 (4.85) | 300 | - | 320 | 1,100 | 35 g/min | - | Trans |
| | CV1-1142 | Self-leveling, Available in Black & White ‡ | Oxime | - | - | 7 d / R.T., H | 1.06 | 30 | 400 (2.75) | 200 | - | - | - | 13,000 | - | Trans |
| | CV1-1142-4 | Self-leveling, Built-in UV Tracer ‡ | Oxime | - | - | 7 d / R.T., H | 1.05 | 35 | 350 (2.4) | 200 | - | - | 500 | 60 g/min | - | Trans |
| | CV2-1142 | Available in Black & White ‡ | Oxime | - | 15 m | 7 d / R.T., H | - | 50 | - | - | - | - | - | Non-slump | - | Trans |
| | CV3-1142 | Spot Bonding, Available in Black & White ‡ | Oxime | - | - | 7 d / R.T., H | 1.11 | 45 | 675 (4.7) | 300 | - | - | - | Non-slump | - | Trans |
| | CV7-1142-1 | Flow Rate 0.7" with 0.375" Plunge ‡ | Oxime | - | 20 m | 7 d / R.T., H | 1.13 | 40 | 700 (4.85) | 300 | 60 (10.6) | 320 | 1,180 | 20 g/min | - | White |
| | CV9-1142 | High Durometer, Low Density ‡ | Oxime | - | 25 m | 7 d / R.T., H | 0.82 | 55 | 400 (2.8) | 85 | - | - | - | 35 g/min | - | White |
| | CV-1143 | Non-Slump ‡ | Oxime | - | 15 m | 7 d / R.T., H | 1.10 | 45 | 800 (5.5) | 400 | - | - | - | Non-slump | - | Trans |
| | CV-2189-2 | Thixotropic | Platinum | - | - | 15 m / 200 | 1.15 | 17 | 750 (5.17) | 700 | 55 (9.7) | - | - | 225,000 | - | Black |
| ADHESIVES & SEALANTS | CV-2187 | Tough, Flowable, Fast Cure | Platinum | 3 h | 15 h | 15 m / 150 | 1.10 | 35 | 925 (6.4) | 400 | 75 (13.2) | - | - | 90,000 | 10:1 | Trans |
| | CV-2287 | Low / High Temperature, Flowable, Fast Cure ‡ | Platinum | 3.5 h | - | 30 m / 150 | 1.11 | 30 | 725 (5.0) | 400 | 55 (9.7) | 535 | 900 | 85,000 | 10:1 | Trans |
| | CV-2289 | Lap Shear 400 psi ‡ | Platinum | - | 4 h | 15 m / 150 | - | 30 | 750 (5.2) | 350 | - | - | - | - | 1:1 | Trans |
| | CV-2289-1 | Pourable Elastomer ‡ | Platinum | 30 m | 4 h | 15 m / 150 | - | 30 | 700 (4.80) | 350 | - | 445 | 955 | A:60,000 / B:40,000 | 1:1 | White |
| | CV-2289-2 | Pourable Elastomer ‡ | Platinum | 30 m | 5 h | 15 m / 150 | - | 30 | 750 (5.2) | 400 | 50 (8.8) | - | - | A:65,000 / B:40,000 | 1:1 | Black |
| | CV1-2289-1 | ⁽⁴⁾ Primed Lap Shear 450 psi (3.1 MPa) ‡ | Platinum | - | - | 15 m / 150 | 1.10 | 30 | 750 (5.2) | 350 | - | - | - | A:65,000 / B:40,000 | 1:1 | White |
| | CV2-2289-1 | Low Viscosity, ⁽⁴⁾ Primed Lap Shear 300 psi (2.1 MPa) ‡ | Platinum | - | 20 h | 4 h / 65 | - | 30 | 450 (3.10) | 250 | - | - | - | A:14,000 / B:10,500 | 1:1 | White |
| | CV3-2289-1 | Low Viscosity, Added Micro-balloons for Bond Line Control ‡ | Platinum | - | 12 h | 7 d / R.T. | - | 35 | 175 (1.20) | 125 | - | - | - | A:15,000 / B:14,000 | 1:1 | White |
| | CV4-2289-1 | Non-flowable ‡ | Platinum | 30 m | 10 h | 30 m / 150 | - | 30 | 650 (4.5) | 400 | - | - | - | A: 1,300,000 / B: 1,000,000 | 1:1 | White |
| | CV7-2289-1 | Primerless Adhesion ‡ | Platinum | - | - | 15 m / 150 | - | 30 | 700 (4.8) | 375 | - | - | - | A: 57,500 / B:400,000 | 1:1 | White |
| | CV-2500 | Pourable, Optically Clear | Platinum | 2 h | 10 h | 15 m / 150 | 1.02 | 50 | 1,000 (6.90) | 125 | - | - | - | A:8,000 | 10:1 | Clear |
| | CV-2500-2 | Low Viscosity, Fast Cure | Platinum | 3 h | 6 h | 30 m / 150 | 1.05 | 50 | 950 (6.6) | 150 | - | 370 | 850 | 8,500 | 10:1 | Black |
| | CV3-2500 | Low Viscosity, Potting & Encapsulant, Optically Clear | Platinum | 3 h | 6 h | 30 m / 150 | 1.02 | 40 | 950 (6.6) | 100 | - | - | - | 3,000 | 10:1 | Clear |
| | CV4-2500 | Low Durometer, Low Viscosity, Optically Clear | Platinum | 2 h | 15 h | 60 m / 65 | - | 25 | - | - | - | - | - | 1,500 | 1:1 | Clear |
| | CV10-2500 | High Durometer, Optically Clear | Platinum | 3 h | 5 h | 15 m / 150 | 1.02 | 50 | 1,000 (6.90) | 130 | - | - | - | 7,500 | 1:1 | Clear |
| | CV14-2500 | Primerless Adhesion | Platinum | - | - | 60 m / 65 | 1.01 | 30 | 425 (2.9) | 150 | - | - | - | 2,600 | 1:1 | Trans |
| | CV15-2500 | ⁽⁴⁾ Primed Lap Shear 225 psi (1.6 MPa), Optically Clear | Platinum | 3 h | 6 h | 15 m / 150 | 1.02 | 50 | 850 (5.9) | 90 | - | 400 | - | A:3,750 / B:2,700 | 1:1 | Clear |
| | CV16-2500 | Low / High Temperature, ⁽⁴⁾ Primed Lap Shear 200 psi (4.1 MPa), Optically Clear | Platinum | 2 h | - | 4 h / 65 | 1.04 | 40 | 650 (4.5) | 100 | - | 490 | - | A:3,600 | 10:1 | Clear |
| | CV-2501 | Longer Work Time, Optically Clear | Platinum | 10 h | - | 15 m / 150 | 1.02 | 50 | 900 (6.2) | 150 | - | - | - | 7,500 | 10:1 | Clear |
| | CV-2502 | Low Flow | Platinum | - | - | 7 d / R.T. | 1.06 | 40 | 800 (5.5) | 200 | - | - | - | 0.3 Inches | 10:1 | Trans |
| | CV-2510 | Low / High Temperature, Flowable ‡ | Alkoxy | 4 h | - | 7 d / R.T., H | 1.19 | 45 | 600 (4.1) | 200 | - | - | - | 45,000 | 100:0.5 | White |
| | CV-2566 | Pourable RTV Cure, ⁽¹⁾ Primed Lap Shear 575 psi (4.0 MPa) ‡ | Alkoxy | 4 h | - | 7 d / R.T., H | 1.49 | 55 | 925 (6.4) | 150 | 40 (7.1) | 330 | 825 | 55,000 | 100:0.5 | Rust |
| | CV1-2566 | ⁽¹⁾ Primed Lap Shear 650 psi (4.5 MPa) ‡ | Alkoxy | 3 h | - | 7 d / R.T., H | 1.45 | 50 | 900 (6.2) | 160 | - | - | - | 45,000 | 100:0.5 | Red |
| | CV2-2566 | ⁽²⁾ Primed Lap Shear 625 psi (4.3 MPa) ‡ | Alkoxy | 2 h | - | 7 d / R.T., H | 1.50 | 55 | 900 (6.2) | 140 | 40 (7.1) | - | - | Thixotropic | 100:0.5 | Red |
| | CV-2567 | Diluent for Tin Condensation CV Silicones ‡ | Alkoxy | 6.5 h | - | 7 d / R.T., H | 1.01 | 21 | 80 (0.6) | 150 | - | - | - | 5,000 | 100:0.5 | Clear |
| | CV-2568 | Long Worktime, Low Density ⁽¹⁾ Primed Lap Shear 100 psi (0.69 MPa) ‡ | Alkoxy | - | - | 7 d / R.T., H | 0.64 | 50 | 175 (1.20) | 60 | - | 180 | 645 | 125,000 | 100:0.5 | Red |
| | CV10-2568 | Fast Cure, Low Density, ⁽⁴⁾ Primed Lap Shear 175 psi (1.2 MPa) ‡ | Platinum | 3 h | - | 30 m / 150 | 0.76 | 40 | 235 (1.62) | 170 | - | 245 | 860 | A:125,000 / B:80,000 | 1:1 | Red |

‡ = Designed for Broad Operating Temperatures

⁽¹⁾ Primed with SP-120

⁽²⁾ Primed with SP-121

⁽⁴⁾ Primed with CF1-135

⁽²¹⁾ Tested per ASTM C1045

⁽²²⁾ Tested per ASTM E 1530

d = days
h = hours
m = minutes

R.T. = Room
Temperature
H = Humidity

g/min = Grams Per Minute

Trans = Translucent
Clear = Clear to
Transparent

CONTROLLED VOLATILITY MATERIALS

| General Purpose | NuSil Product Number | Comments | Cure System | Work Time | Tack Free Time | Cure Time / Temp °C | Specific Gravity | Durometer Type A | Tensile psi (mPa) | Elongation % | Tear ppi (kN/m) | CTE ppm/°C | Dielectric Strength V/mil | Flow (Inches) Viscosity (cP/mPa-sec) Extrusion (g/min) | Mix Ratio | Color | |
|---|--|--|---|-----------|----------------|---------------------|----------------------|------------------|-------------------|--------------|-----------------|------------|---------------------------|--|-----------|------------|-------|
| Materials are tested in accordance with ASTM E 595 Total Mass Loss (TML) of ≤ 1.0% and Collected Volatile Condensable Materials (CVCM) of ≤ 0.10% | | | | | | | | | | | | | | | | | |
| Properties listed are typical - Do not use as a basis for preparing specifications. Please contact NuSil Technology for assistance and recommendations. | | | | | | | | | | | | | | | | | |
| ELECTRICALLY CONDUCTIVE / STATIC DISSIPATIVE | CV-1500 | 3.0 ohm-cm, ¹⁾ Primed Lap Shear 325 psi (2.2 MPa), ²²⁾ 0.32 W/m·K ‡ | Oxime | - | 10 m | 7 d / R.T., H | 1.25 | 80 | 650 (4.5) | 20 | - | 435 | - | Thixotropic | - | Black | |
| | CV-2640 | 2.5 ohm-cm, ⁴⁾ Primed Lap Shear 250 psi (1.7 MPa), Carbon Fiber Filled ‡ | Platinum | 2 h | - | 30 m / 150 | 1.19 | 75 | 475 (3.3) | 90 | - | 580 | - | - | 10:1 | Black | |
| | CV1-2640 | 25 ohm-cm, Pumpable | Platinum | - | - | 2 h / 65 | 1.07 | 40 | 525 (3.62) | 225 | - | - | - | A:300 g/min / B:150 g/min | 10:1 | Black | |
| | CV2-2640 | Carbon Black Filled ‡ | Platinum | 60 m | - | 24 h / R.T. | 1.06 | 30 | 515 (3.6) | 365 | 30 (0.05) | - | - | A:1,250,000 / B:100,000 | 1:1 | Black | |
| | CV3-2640 | 2.2 x 10 ⁵ ohm-cm | Platinum | - | 10 h | 7 d / R.T. | 1.01 | 25 | 70 (0.48) | 120 | - | - | - | A:10,000 / B:10,000 | 1:1 | Black | |
| | CV-2644 | 0.005 ohm-cm, ²²⁾ 1.2 W/m·K | Platinum | 3 h | - | 30 m / 150 | 3.39 | 85 | 525 (3.6) | - | - | - | 215 | - | Paste | 20:1 | Tan |
| | CV2-2644 | 0.004 ohm-cm | Platinum | 2.5 h | - | 30 m / 150 | 3.04 | 85 | 500 (3.4) | 100 | - | - | - | - | Paste | 20:1 | Tan |
| | CV1-2646 | 0.005 ohm-cm ‡ | Alkoxy | 2.5 h | - | 7 d / R.T., H | 2.20 | 90 | - | - | - | - | - | - | 0 inches | 100:0.5 | Tan |
| CV2-2646 | 0.003 ohm-cm, ^{21, 22)} 1.5 W/m·K, Remains Conductive at High Temperature ‡ | Alkoxy | 2 h | - | 7 d / R.T., H | 3.23 | 75 | 300 (2.06) | 70 | 55 (9.7) | - | - | - | 4 inches | 100:0.5 | Gray/Green | |
| THERMALLY CONDUCTIVE | CV-2900 | ²²⁾ 0.609 W/m·K, Low Temperature ‡ | Oxime | - | 40 m | 72 h / R.T., H | 2.33 | 65 | 400 (2.8) | 150 | - | - | - | 40 g/min | - | White | |
| | CV-2942 | ²²⁾ .999 W/m·K, ⁴⁾ Primed Lap Shear 375 psi (2.6 MPa) | Platinum | 2.5 h | 4 h | 24 h / R.T.** | 2.40 | 85 | 650 (4.5) | 15 | 55 (9.7) | 185 | 430 | Paste | 20:1 | Gray | |
| | CV-2943 | ²²⁾ 1.22 W/m·K, ³⁾ Primed Lap Shear 475 psi (3.3 MPa) | Alkoxy | 2 h | - | 7 d / R.T., H | 2.55 | 90 | 750 (5.17) | 35 | 90 (15.9) | 130 | - | Paste | 100:0.2 | Gray | |
| | CV-2946 | ²²⁾ 1.49 W/m·K, ⁴⁾ Primed Lap Shear 165 psi (1.0 MPa) | Platinum | 2 h | 4.5 h | 7 d / R.T. | 1.53 | 75 | 200 (1.38) | 30 | 50 (8.8) | - | 540 | Paste | 15:1 | White | |
| | CV2-2946 | ²²⁾ 0.644 W/m·K, Thin Bond Line | Platinum | 3 h | - | 30 m / 150 | - | 55 | 400 (2.75) | 225 | 55 (9.7) | - | - | 140 g/min | 20:1 | White | |
| | CV-2948 | ²²⁾ 1.95 W/m·K, ³⁾ Primed Lap Shear 150 psi (1.0 MPa) ‡ | Alkoxy | 2.5 h | - | 7 d / R.T., H | 1.57 | 80 | 250 (1.20) | 30 | 45 (7.9) | - | - | Paste | 100:0.2 | White | |
| | CV-2960 | ²²⁾ 0.828 W/m·K, ⁴⁾ Primed Lap Shear 205 psi (1.4 MPa), Low Viscosity | Platinum | 1.5 h | 3 h | 7 d / R.T. | 1.34 | 60 | 205 (1.4) | 110 | 45 (7.1) | 275 | - | A:130,000 | 10:1 | White | |
| | CV1-2960 | ²²⁾ 1.11 W/m·K | Platinum | 2 h | 4 h | 4 h / 65 | 1.45 | 75 | 250 (1.38) | 60 | 55 (9.7) | - | - | A:900,000 | 10:1 | White | |
| | CV1-2964 | ²²⁾ 0.95 W / m·K, ⁵⁾ Primed Lap Shear 120 psi (0.8 Mpa) | Platinum | - | 13 h | 15 m / 150 | 2.34 | 65 | 180 (1.2) | 50 | - | - | - | 52,000 | 1:1 | White | |
| | CV-2961 | ²²⁾ 0.791 W/m·K Low Viscosity, ³⁾ Primed Lap Shear 205 psi (1.4 MPa), Low Temp ‡ | Platinum | 2 h | - | 30 m / 150 | 1.38 | 75 | 275 (1.9) | 40 | 45 (7.9) | 275 | - | A:300,000 | 10:1 | White | |
| CV-2963 | ²²⁾ 0.64 W/m·K, ⁴⁾ Primed Lap Shear 275 psi (1.9 MPa) | Platinum | 2 h | - | 4 h / 65 | 1.27 | 60 | 425 (2.9) | 250 | 50 (8.8) | - | - | Paste | 20:1 | White | | |
| DAMPENING FLUIDS, LUBRICANTS & GREASES | CV-7300 | Refractive Index 1.40 | - | - | - | - | 0.97 | - | - | - | - | - | - | 1,000 to 100,000 | - | Clear | |
| | CV-9042 | Thermally Conductive | - | - | - | - | 1.61 | - | - | - | - | - | - | Medium Grease | - | White | |
| | CV-9052 | Volume Resistivity 1x10 ¹⁵ ohm-cm | - | - | - | - | 1.10 | - | - | - | - | - | - | Medium Grease | - | Grey | |
| | CV-9341 | Thermally Conductive | - | - | - | - | 2.30 | - | - | - | - | - | - | Medium Grease | - | White | |
| FILM ADHESIVES | FILMS | CV-2680-12 | 0.012 inches (12 microns) Thick, 2-Part Film, Lap Shear 250 psi (1.7 MPa) | Platinum | 4 h | - | 4 h / 65 | - | - | - | - | 465 | - | - | 2-Part | Trans | |
| | | CV-2681-12 | Volume Resistivity, 125 ohm-cm, Lap Shear 70 psi (0.48 MPa) | Platinum | 4 h | - | 4 h / 65 | - | - | - | - | - | - | - | 2-Part | Black | |
| | PRESSURE SENSITIVE | CV-1161 | 50% Solids, 7.5 ppi Release Force | - | - | - | - | - | - | - | - | - | - | - | 3,000 | - | Clear |
| | | CV2-1161 | High Temp, 35% Solids, 2.5ppi Release Force | Peroxide | - | - | 1 h / 60 + 1 h / 175 | - | - | - | - | - | - | - | 770 | 100:1 | White |
| | | CV3-1161 | Non-Voc Solvent, Tert Butyl Acetate | Peroxide | - | - | - | - | - | - | - | - | - | - | 1,200 | 100:1 | Trans |
| TAPES | CV4-1161-5 | 0.005 inches (5 microns) Double Side Tape, Kapton® Center, 2.0 ppi | - | - | - | - | - | - | - | - | - | - | - | - | - | Trans | |
| GELS | CV-8151 | Low Viscosity, Penetration 4.0 mm | Platinum | >30 h | - | 30 m / 150 | - | - | - | - | - | - | - | 2,500 | 1:1 | Clear | |
| | CV1-8151 | Penetration 0.4 mm | Platinum | > 30 h | - | 30 m / 150 | - | - | - | - | - | - | - | 2,500 | 1:1 | Clear | |
| | CV-8251 | Low/High Temperature, Penetration 3 mm ‡ | Platinum | 24 h | - | 40 m / 150 | - | - | - | - | - | - | - | 1,800 | 1:1 | Clear | |
| FOAMS | CV-2391 | Low density, Soft, 14lb/ft ³ (0.224g/mL) | Platinum | - | - | 1 h / R.T. | - | - | - | - | - | - | - | 3,000 | 1:10 | White | |
| PRIMERS | SP1-204 | 1 and 2 Part RTV System, 3.3% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.79 | - | - | - | - | - | - | - | - | Clear | |
| | SP-120 | General Purpose, 4.1% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1.0 | - | Clear | |
| | SP-121 | General Purpose, 3.5% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1.0 | - | Red | |
| | CF2-135 | Addition Cure Systems, 4.7% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1.0 | - | Clear | |
| | CF1-141 | Addition Cure Systems, IPA Based, 6% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.80 | - | - | - | - | - | - | 1.0 | - | Red | |
| | SP-270 | Addition Cure Systems, Difficult Substrates, 15% Solids | Hydrolysis | - | - | 1 h / R.T., H | 0.77 | - | - | - | - | - | - | 1.0 | - | Trans | |
| | SP-271 | Addition Cure Systems, Difficult Substrates, 20% Solids | Hydrolysis | - | - | - | 0.80 | - | - | - | - | - | - | 1.0 | - | Trans | |

‡=Designed for Broad Operating Temperatures

¹⁾ Primed with SP-120
³⁾ Primed with SP-130
⁴⁾ Primed with CF1-135
⁵⁾ Primed with SP-270
²¹⁾ Tested per ASTM C1045
²²⁾ Tested per ASTM E1530

d = days
h = hours
m = minutes

R.T. = Room Temperature
H = Humidity
** Post-cure 15 m / 150

g/min = Grams Per Minute

Trans = Translucent
Clear = Clear to Transparent

Product Name Legend

The key properties of NuSil Technology's LightSpan™ Materials can easily be distinguished by the product name.

The first digit of the product name represents the hardness of the optical silicone.

- Optical Gels (Soft to 00 Durometer): LS-3XXX
- Optical Thermosets (Type A and D durometer): LS-6XXX
- Optical Fluids (do not cure): LS-5XXX

For all materials, excluding primers, the last 2 digits of the product name are the last 2 digits of the refractive index measured at 589 nm.

For example: LS-3351 is an optical gel when cured and the refractive index is 1.51.

Index Matching

LightSpan™ materials are very effective for index matching of common materials used in Optical Applications. Some common materials, shown in the table below, use the following LS products for index matching.

| Material Type | Acronym | Refractive Index | LS Products |
|--------------------|------------------|------------------|------------------|
| Magnesium Fluoride | MgF ₂ | 1.38 | LS-3238 |
| Fused Silica | SiO ₂ | 1.46 | LS-3246 |
| Acrylate | PMMA | 1.49 | LS-3249 |
| Borosilicate | BK | 1.52 | LS1-3252 |
| Cyclic Olefin | COC, COP | 1.52 | LS1-3252 |
| Polycarbonate | PC | 1.59 | LS-3357, LS-6257 |

| General Purpose | NuSil Product Number | Comments | Refractive Index 589 nm | Work Time | Durometer | Viscosity cP/mPa-sec | Cure Time/Temp °C | Tensile psi (MPa) | Elongation % | CTE ppm/°C | Mix Ratio | Application |
|----------------------------------|----------------------|---|-------------------------|---------------------|--------------------|----------------------|-----------------------|-------------------|---------------|--------------|----------------|---|
| OPTICAL GELS | LS-3238 | Resistant to Hydrocarbon Solvents ‡ | 1.38 | 11 h | '00' / '000 | 1,500 | 30 m / 150 | - | - | - | 1:1 | Index Matches MgF ₂ , AR Coating |
| | LS-3140 | Low Volatility, Penetration 0.4 mm, non-phenyl containing | 1.40 | > 24 h | ^{*31} MBP | A:16,000/B:8,50 | 30 m / 150 | - | - | 411 | 1:1 | Encapsulant, Potting |
| | LS-3440 | Very Soft, Penetration 9.0 mm, non-phenyl containing | 1.40 | >24 h | ^{*32} MBP | 535 | 60 m / 100 | - | - | 300 | 1:1 | Encapsulant, Potting |
| | LS-3441 | Firm and Tacky Gel, Penetration 0.4 mm, non phenyl containing | 1.41 | - | ^{*31} MBP | 14,500 | 30 m / 150 | - | - | - | 1:1 | Encapsulant, Potting |
| | LS-3443 | Soft and Tacky Gel, Penetration 5 mm ‡ | 1.43 | - | ^{*31} MBP | A:500/B:650 | 30 m / 100 | - | - | 300 | 1:1 | Encapsulant, Potting |
| | LS-3246 | Index matches to glass such as fused silicates (Glass, Quartz) ‡ | 1.46 | 8 h | 10 / NA | 1,000 | 60 m / 65 | - | - | - | 1:1 | Index Matches Silica, Optical Fiber, Glass. LCD Bonding |
| | LS-3249 | Index matches to acrylates such as PMMA | 1.49 | 48 H | 60 | - | 60 m / 75 | - | - | - | 1:1 | Bonding, Encapsulant |
| | LS-3351 | Use with Phosphor, Index matches to Crown Glass such as BK7 Index matches to plastics such as COC ‡ | 1.51 | 160 m (1.2xVi) | NA / 55 | 6,000 | 60 m / 100 | - | - | - | 1:1 | Excellent for Dispersing Phosphor |
| | LS1-3252 | Low Viscosity and 1.52 RI, Index Matches BK7, GlassUse with Phosphor, Index matches to plastic such as COC ‡ | 1.52 | - | 25 / NA | 360 | 30 m / 150 | - | - | - | 1:1 | Excellent for LCD Display and LED Encapsulation |
| | LS-3354 | Use with Phosphor ‡ | 1.54 | 90 m (2xVi) | NA / 64 | 5,400 | 60 m / 70 | - | - | - | 1:1 | Excellent for Dispersing Phosphor |
| | LS2-3354 | Contains adhesion promoter, use with Phosphor ‡ | 1.54 | 2 h min (2xVi) | 15 / 53 | 6,000 | 60 m / 70 | - | - | - | 1:1 | Excellent for Dispersing Phosphor |
| | LS3-3354 | Contains adhesion promoter, use with Phosphor ‡ | 1.54 | 80 m (2xVi) | NA / 60 | 5,200 | 60 m / 70 | - | - | - | 1:1 | Excellent for Dispersing Phosphor |
| | LS4-3354 | Longer work time for dispensing applications, 80 °C minimum cure | 1.54 | - | 60 | 4,200 | 60 m / 70 | - | - | - | 1:1 | Excellent for Dispersing Phosphor |
| | LS-3357 | 100 °C minimum cure ‡ | 1.57 | >10 d | 10 / NA | 200 | 60 m / 150 | - | - | - | 1:1 | Very high RI Encapsulant, LED Encapsulation |
| OPTICAL ADHESIVES AND ELASTOMERS | LS-6140 | Low Volatility, non-phenyl containing | 1.40 | 3 h | Type 'A' | A:3,700/B:2,550 | 15 m / 150 | 850 (5.9) | 90 | 400 | 1:1 | Bonding, Encapsulant, Dispersing Phosphor |
| | LS1-6140 | LS-6140 with longer work time for dispensing, 80 C minimum cure | 1.40 | - | 50 | A:3,450/B:2,500 | 60 m / 150 | 900 (6.2) | 90 | - | 1:1 | Bonding, casting or injection molding |
| | LS-6941 | Non-phenyl containing | 1.41 | 4 h | 50 | 5,300 | 15 m / 150 | 1300 (9.0) | 95 | 500 | 10 :1 | Bonding, Encapsulant |
| | LS1-6941 | Tough, Tensile 750 psi, Tear 80 ppi | 1.41 | >24 h | 50 | A:75,000/B:50,000 | 30 m / 150 | 750 (5.2) | 305 | - | 1:1 | Lenses made by Injecting or Compression Molding |
| | LS2-6941 | Low viscosity, non-phenyl containing | 1.41 | 5.5 h | 30 | A:1,200/B:800 | 15 m / 150 | 120 (0.83) | 100 | 337 | 1:1 | Lower durometer where stress is concerned |
| | LS-8941 | High Durometer to reduce tackiness, non-phenyl containing | 1.41 | >24 h | 80 | A:27,500/B:25,000 | 30 m / 150 | 1,250 (8.6) | 65 | - | 1:1 | Lenses made by Injecting or Compression Molding |
| | LS-6143 | Broad operating temperature range ‡ | 1.43 | 2 h | 40 | A:3,600 | 4 h / 65 | 600 (4.1) | 125 | 490 | 10:1 | Bonding, Encapsulant |
| | LS-6943 | Broad operating temperature range ‡ | 1.43 | - | 40 | 5,400 | 60 m / 100 | 900 (6.2) | 120 | - | 10:1 | Bonding, Encapsulant |
| | LS-6946 | Primed Lap Shear 510 psi, Youngs Modulus 425 psi | 1.46 | 2 h | 30 | A:40,000/B:35,000 | 30 m / 150 | 675 (4.7) | 275 | 360 | 1:1 | Bonding, Molding |
| | LS-6257 | 100 °C minimum cure, Low Viscosity ‡ | 1.57 | 3 d | 39 | 150 cSt | 1 h / 150 | 122 | 49 | - | 1:1 | Bonding, Coating |
| OPTICAL FLUIDS | LS-5238 | Resistant to Hydrocarbon Solvents, available in 350 cPs & 1000 cPs | 1.38 | - | - | 350 or 1,000 | - | - | - | - | - | Index Matches MgF ₂ , AR Coating |
| | LS-5246 | - | 1.46 | - | - | 1,550 | - | - | - | - | - | Index Matches Silica, Optical Fiber, Glass |
| | LS-5252 | - | 1.52 | - | - | 575 | - | - | - | - | - | Index Matches BK7, Glass |
| | LS-5257 | - | 1.57 | - | - | 1,400 | - | - | - | - | - | Assemblies, Ionizing Radiation, Infrared Illumination |
| OPTICAL GREASES | LS-1246 | Flows Under Pressure, Non-Slumping, Non-Curing | 1.46 | - | - | - | - | - | - | - | - | Index Matches Silica, Optical Fiber, Glass |
| | LS-1249 | Flows Under Pressure, Non-Slumping, Non-Curing | 1.49 | - | - | - | - | - | - | - | - | Index Matches POF, PMMA |
| OPTICAL PRIMERS | LS1-3200 | All Purpose Primer for Optical Applications | 1.4 to 1.425 | - | - | 1.0 | - | - | - | - | - | Adheres to various substrates |
| | LS2-3200 | Improves Adhesion to Difficult Substrates | 1.4 to 1.425 | - | - | 1.0 | - | - | - | - | - | Adheres to difficult substrates |
| | LS3-3200 | Maintains Transparency at 400nm | 1.4 to 1.425 | - | - | 1.0 | - | - | - | - | - | Improves Adhesion to Difficult Substrates |

‡= Designed for Broad Operating Temperatures
 MBP = Measured by Penetration
^{*31} Tested per NuSil TM017
^{*32} Tested per NuSil TM036

h = Hours
 m = Minutes
 d = Days

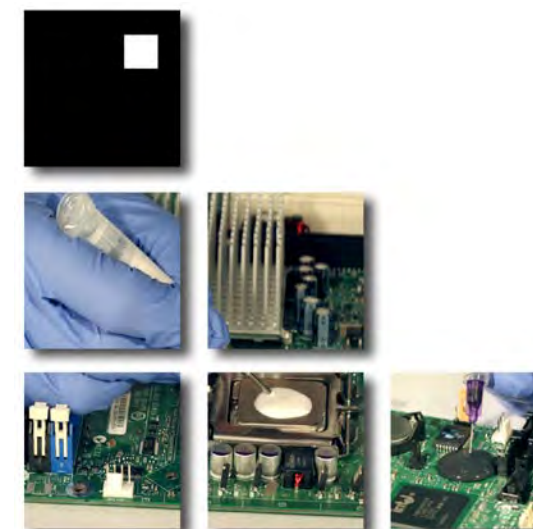
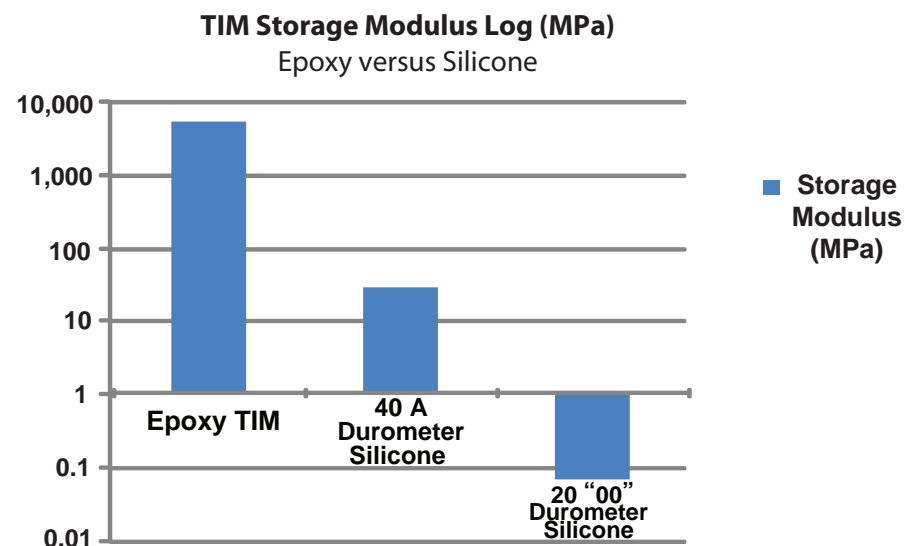
| General Purpose | NuSil Product Number | Comments | Cure System | Work Time @ 25°C | Cure Time / Temp °C | Durometer Type A | Tensile psi (MPa) | Elongation % | Tear ppi (kN/m) | ²⁷⁾ Ionic Content Cl / K / Na ppm | Viscosity cP / mPa-sec | Specific Gravity | ²⁸⁾ Volume Resistivity ohm-cm | Dielectric Strength V/mil | Mix Ratio | Color | |
|---|-------------------------|---|--|-------------------------|---------------------|-----------------------|-------------------|-----------------------|-----------------|--|----------------------------------|----------------------|--|--|--------------------|-----------------|------------------|
| EPM 's meet a low volatility specification of <1% weight loss when exposed to a minimum of 275°C for 1 hour, reference ASTM D2288 | | | | | | | | | | | | | | | | | |
| POTTING & ENCAPSULATING MATERIALS | EPM-2410 | Ideal for Static Mix and Dispense Applications. Also available in Black and White ‡ | Platinum | 30 m | 15 m / 150 | 30 | 675 (4.7) | 350 | - | <5 / <2 / <4 | A:62,000 / B:40,000 | - | 1 x 10 ¹⁵ | - | 1:1 | Trans | |
| | EPM-2420 | Low Viscosity, Self-leveling Adhesive to Polyester and Polyether | Platinum | 5,000 cPs max after 2 h | 60 m / 65 | 30 | 400 (2.8) | 150 | - | <2 / <1 / <8 | A:2,450 / B:1,200 | 1.01 | - | - | 1:1 | Clear | |
| | EPM-2421 | Low Viscosity, Self-leveling, General Adhesive and Encapsulant | Platinum | 3 h | 15 m / 150 | 50 | 800 (5.5) | 90 | - | <5 / <2 / <4 | A:3,750 / B:2,700 | 1.02 | 1 x 10 ¹⁵ | ²³⁾ 550 | 1:1 | Clear | |
| | EPM-2422 | 1.43 Refractive Index ‡ | Platinum | 7,000 cPs max after 2 h | 4 h / 65 | 40 | 600 (4.1) | 100 | - | <5 / <1 / <1 | A:3,600 | 1.04 | 1 x 10 ¹⁵ | ²³⁾ 550 | 10:1 | Clear | |
| STATIC DISSIPATIVE | EPM-2461 | Carbon black filled for EMI shielding applications ‡ | Platinum | 60 m | 24 h / R.T., H | 30 | 550 (3.8) | 400 | 30 (5.3) | <5 / <1 / <6 | A:1,250,000 / B:100,000 | - | 900 | - | 1:1 | Black | |
| POTTING & ENCAPSULATING GELS | EPM-2480 | Useful for Potting Intricate Assemblies Due to Low Viscosity | Platinum | 24 h | 30 m / 150 | Firm Gel | - | - | - | <5 / <1 / <2 | 3,000 (mixed) | - | 1 x 10 ¹⁴ | - | 1:1 | Trans | |
| | EPM-2481 | Tough Firm Gel | Platinum | 24 h | 30 m / 150 | Very Firm Gel | - | - | - | <5 / <1 / <2 | A:15,000 / B:9,000 | - | 1 x 10 ¹⁴ | - | 1:1 | Clear | |
| | EPM-2482 | Extreme Temperatures ‡ | Platinum | 24 h | 40 m / 150 | Firm Gel | - | - | - | <5 / <1 / <4 | 1,800 (mixed) | - | 1 x 10 ¹⁴ | - | 1:1 | Trans | |
| GLOB TOP | EPM-2411-2 | Glob Top encapsulant. Shear Thinning Index 2.5 | Platinum | >8 h | 15 m / 200 | 17 | 750 (5.2) | 700 | 55 (9.7) | - | 300,000 | 1.16 | - | ²³⁾ 400 | - | Black | |
| THERMAL INTERFACE MATERIAL (TIM) | GREASE | EPM-2401 | ²²⁾ 0.70 W/m·K, BLT <1 µm, Zinc filled | - | - | - | - | - | - | <5 / <2 / <4 | Medium Grease | 2.30 | 1 x 10 ¹⁵ | ²⁴⁾ 13 kV @ 0.10 inch spacing | - | White | |
| | | EPM-2462 | ²²⁾ 1.20 W/m·K, good adhesion to Aluminum | Platinum | 3 h | 30 m / 150 | 85 | 550 (3.4) | - | - | <5 / <7 / <5 | Paste | 3.39 | 0.006 | - | 20:1 | Tan |
| | ELECTRICALLY CONDUCTIVE | EPM-2463 | ^{21, 22)} 1.5W/m·K, remains conductive over broad operating temperature range ‡ | Tin/Oxime | 2 h | 7 d / R.T., H | 80 | 300 (2.1) | 75 | 55 (9.7) | < 5 / <10 / < 5 | 8 Inches per min. | 3.30 | 0.002 | - | 100:0.5 | Green-Gray |
| | | EPM1-2493 | Low viscosity for complex geometries 1 W/m·K | Platinum | 13 h | 15 m / 150 | 65 | 180 (1.2) | 50 | - | - | 36,000 cP, -15 m | 2.34 | - | - | 1:1 | White |
| | ADHESIVES | EPM-2490 | ²²⁾ Bulk Thermal Conductivity 1.46 W/m·K | Platinum | 2 h | 7 d / R.T. | 75 | 200(1.4) | 30 | 50 (8.8) | <5 / <3 / <10 | Paste | 1.53 | 5.3 x 10 ¹⁴ | ²³⁾ 540 | 15:1 | White |
| | | EPM-2492 | ²²⁾ 0.62 W/m·K, BLT 200 µm, BN filled ‡ | Platinum | 2 h | 30 m / 150 | 75 | 250 (1.72) | 40 | - | <5 / <1 / <1 | A:470,000 | - | - | - | 10:1 | White |
| | | EPM-2890 | ²²⁾ 0.6 W/m·K, Low Temperature | Tin/Oxime | - | 72 h / R.T., H. | 65 | 400 (2.8) | 150 | - | <5 / <5 / <5 | - | 2.33 | - | - | 1-Part | White |

²¹⁾ Tested per ASTM C1045
²²⁾ Tested per ASTM E1530
 ‡ = Designed for broad operating temperatures

d = day R.T. = Room Temperature
 h = hour H = Humidity
 m = minutes

²⁷⁾ Tested per MIL STD 883E

²⁸⁾ Tested per D257 ²³⁾ Tested per ASTM D149
²⁴⁾ Tested per ASTM D877



Corporate Headquarters
NuSil Technology - USA
1050 Cindy Lane
Carpinteria, CA 93013
+1 (805) 684-8780
+1 (805) 566-9905 Fax
silicone@nusil.com
www.nusil.com

NuSil Technology Europe
Parc d'Activités de Sophia Antipolis
Le Natura Bt2
1198, avenue Maurice Donat
06250 MOUGINS France
+33 4 92 96 93 31
+33 4 92 96 06 37 Fax
nusil.sophia@nusil.com
www.nusil.com

NuSil Technology Asia
7 Temasek Boulevard, #44-01
Suntec Tower 1
Singapore 038987
+ 65 64306690
+ 65 64306691 Fax
nusilasia@nusil.com
www.nusil.com



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Polymer Systems Technology Limited



An Avantor brand

Silicone Sales & Services UK - Ireland - Benelux

© 2017 - Polymer Systems Technology Limited™
Unit 2. Network 4. Cressex Business Park,
Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: <https://www.silicone-polymers.co.uk>

email: sales@silicone-polymers.co.uk

