

WEATHERSTRIP & GLASS Coatings and Adhesives

SELECTOR GUIDE

SEA (Southeast Asia)



With over half a century of experience in developing and manufacturing high-performance solutions, Parker LORD is a global leader in Weatherstrip & Glass coatings and adhesives technology for the automotive and general industries. Our products cover a wide range of applications, material substrates and manufacturing processes, serving the most demanding environments. Not only are our products offered globally, but we bring world-class technical support to every region of the world.

Our relentless focus on research and innovation brings cuttingedge technology and long-term value to our customers. We understand the critical aspects of their business and accompany them throughout each step of the product selection and implementation process.

SIPIOL® WEATHERSTRIP COATINGS

Sipiol® weatherstrip coatings significantly improve the performance and lifetime of automotive sealings on passenger and commercial vehicles. We collaborate with our customers and partners to develop coatings that meet the demanding specifications of the automotive industry.

Our coating solutions are designed to offer excellent noise reduction performance and increased passenger comfort. They are particularly suited for applications on electric vehicles. These coatings provide abrasion resistance and are formulated to withstand the harshest environments including extreme temperatures, UV rays, water, ice and cleaning chemicals. Our products are mostly water-based and do not contain any toxic classified substances, meeting the industry's increased demand for sustainable solutions.

Sipiol weatherstrip coatings are approved by the leading global car manufacturers. See full product listing for primers, cross-linkers, thickeners and setting aides.

Features & Benefits

- Excellent noise reduction
- High abrasion resistance
- High resistance to UV exposure
- One-component and two-component systems
- Water-based systems
- Spray and brush application
- Coatings can be over-painted

Primers

- Solvent- and water-based systems
- Suitable for a variety of elastomers
- Different activation temperatures
- Spray and brush application



| APPLICATION | SMOOTH COATINGS | PARTICULATED COATINGS |
|--|---|-----------------------------------|
| PRIMARY DOOR SEALING, TRUNK-BONNET, HOOD SEALING | WL 1120-21 WL 1120-23 WL 2010-23 Autoseal RC-3007S Clear Autoseal RC-3011 Black Autoseal RC-3012 Clear | |
| SECONDARY DOOR SEALING, FRAMELESS DOORS, CONVERTIBLES | WL 2010-24 | WL 2015-22P WL 1025-21 WL 1026-21 |
| GLASS RUN CHANNELS | | WL 2015-22P WL 1025-21 WL 1026-21 |
| SUN ROOFS | WL 2010-24 | WL 1026-21 WL 1025-21 |

FLOCKLOK® & FLOCKSIL® FLOCK ADHESIVES

Flocklok® and Flocksil® flock adhesives are designed to adhere polyester or nylon flock fibers to a variety of elastomers (including EPDM, NR, CR, SBR) and thermoplastic elastomers (TPE). The flocked elastomer forms an insulating weather seal around windows, protecting passenger cars and commercial vehicles from dust and dirt entering the cabin. Our flock adhesives provide excellent durability, abrasion resistance and adhesion. They protect the rubber sealing from wear, facilitate glass sliding and contribute to noise reduction and increased passenger comfort.

Features & Benefits

- One-component and two-component systems
- Different solvent compositions and curing times
- Excellent adhesion to a variety of substrates and types of flock
- Process compatibility can be applied online and offline

Catalysts

- Customizable to specific customer processes
- High efficiency
- DTBL-free versions available



| | SUBSTRATES | | | | | | | | |
|-----------------|-------------------|----------------------|---------------------------------------|--|--|--|--|--|--|
| COLOR | EPDM, NR, CR, SBR | TPO | PVC, ALCRYIN, SUNPRENE, NYLON, ABS | | | | | | |
| BROWN | 852F | | | | | | | | |
| BLACK | 1506 G 1 | 1506 G 1 | | | | | | | |
| CLEAR OR YELLOW | | Autoseal RC-3902H | 7000/7204 | | | | | | |

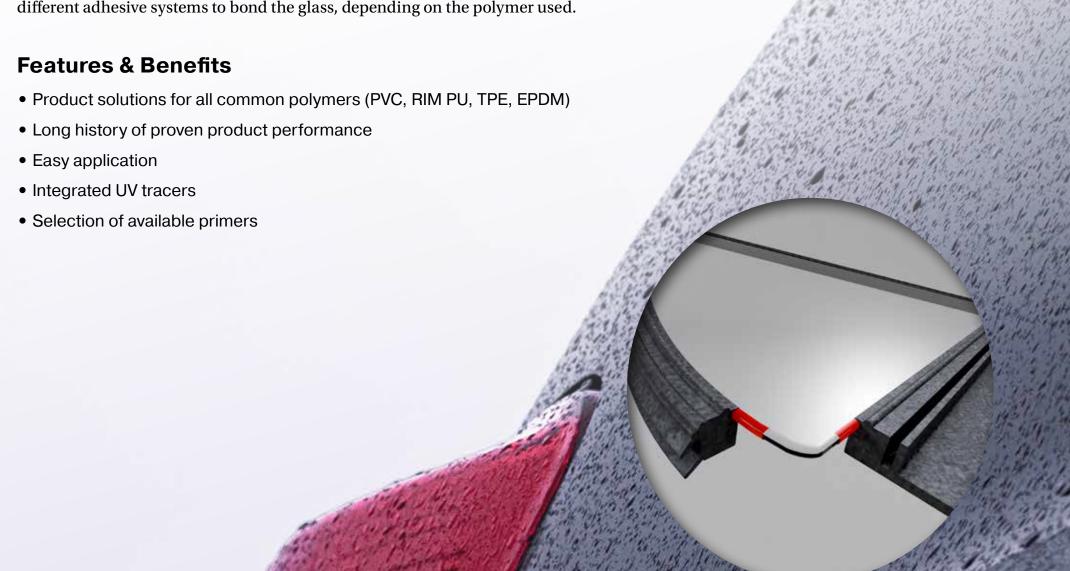




See Selector Guide insert for technical data.

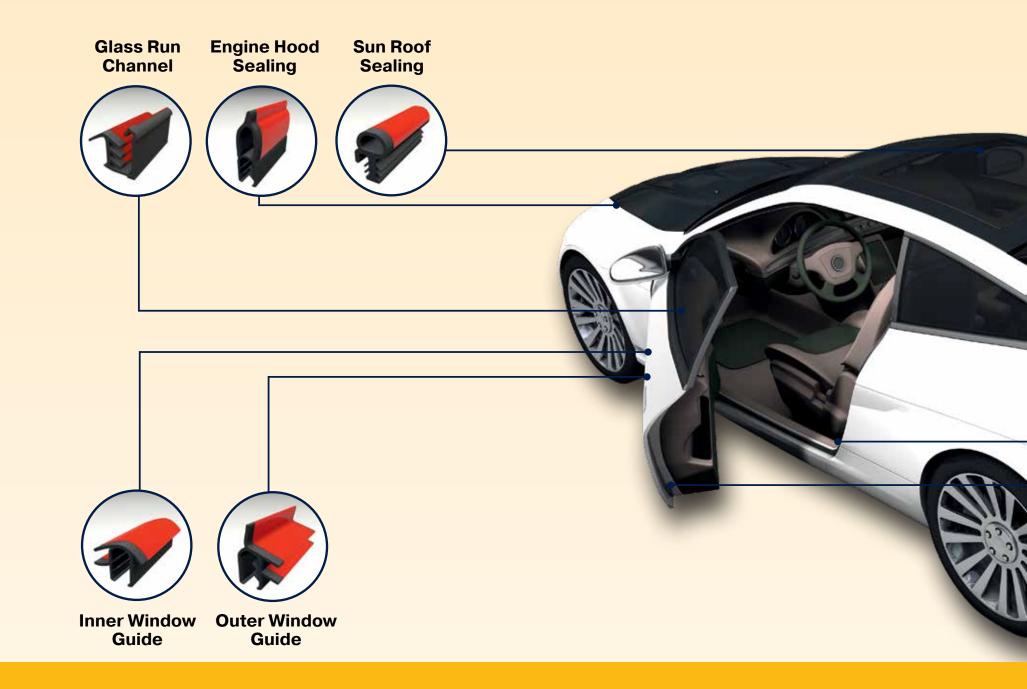
CHEMLOK® GLASS ENCAPSULATION ADHESIVES

Chemlok® glass encapsulation adhesives are designed for the production of automotive windshields, side windows (modular windows) and rear windows. They form a strong bond between the polymer and the window glass during the encapsulation process. We recommend different adhesive systems to bond the glass, depending on the polymer used.

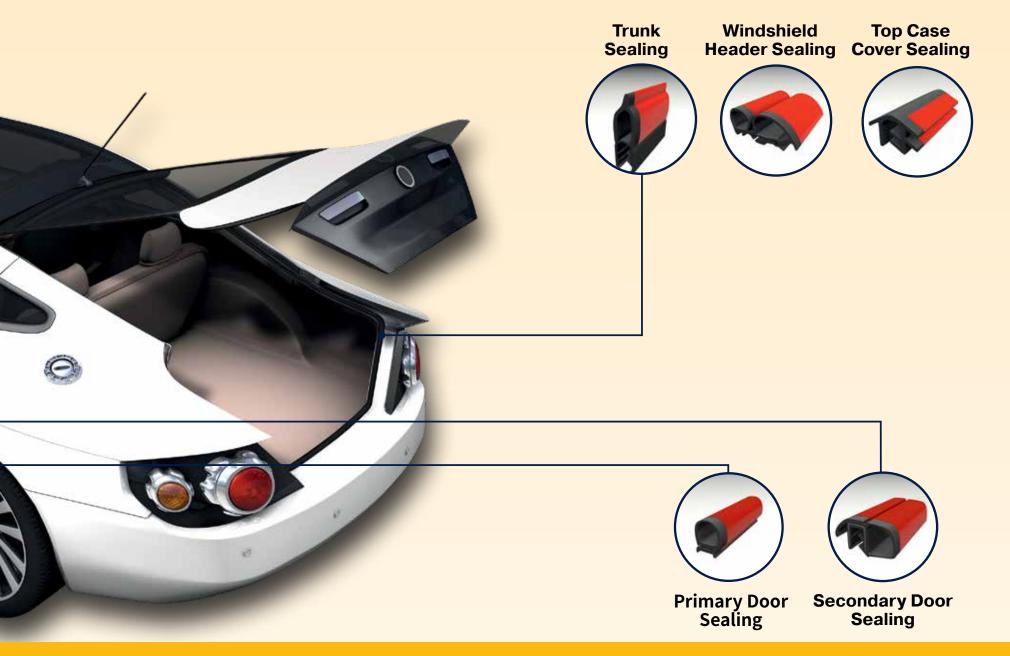


| INJECTED POLYMER | GLASS, METAL AND PLASTICS ONLY | STEEL, ALUMINUM, E-COATED METAL, GLASS, FABRIC, ARCHITECTURAL AND AUTOMOTIVE GLASS, CONCRETE AND SOME PLASTICS |
|-------------------------------------|-----------------------------------|--|
| PVC | 489/456 | |
| TPE | 144 487 A/B | 144 487 A/B |
| SILICONE RUBBER, FKM, PA, PET | AP-133 | AP-133 |
| RIM-PU | AP-134 144 | AP-134 144 |
| EPDM | 144 6150 8560S | |

AUTOMOTIVE WEATHERSTRIP APPLICATIONS



For Convertibles:



WEATHERSTRIP COATINGS

| PRODUCT | MAIN APPLICATION | MAIN SUBSTRATE | 1K/2K | BASE | PARTICLE SIZE, μm | COLOR | SOLIDS, % | VISCOSITY mPa·s / cps except as noted | NOISE REDUCTION | ABRASION RESISTANCE | WEATHERING | COEFFICIENT OF FRICTION |
|---|--|----------------------|---------------------------------|---------|----------------------|--------------------------------|-----------------|---|--------------------|------------------------|------------|----------------------------|
| Sipiol WL 1120-21 | Door sealing, trunk-bonnet, hood sealing | EPDM, Sponge | 1K | Aqueous | No Particles | Black | 30.0-34.5 | 10-100 | ++ | ++ | +++ | 0.3 |
| Sipiol WL 1120-23 | Door sealing, trunk-bonnet, hood sealing, o-rings | EPDM, Sponge | 1K | Aqueous | No Particles | Black | 31-36 | 10-150 | ++ | +++ | +++ | 0.3 |
| Sipiol WL 2010-23 | Door sealing, trunk-bonnet, hood sealing | EPDM, TPO, Sponge | 2K (WV 21) | Aqueous | No Particles | Black | 31-36 | 400-600 | ++ | +++ | +++ | 0.26 |
| Sipiol WL 2010-24 | Door sealing, trunk-bonnet, hood sealing | EPDM, TPO, Sponge | 2K (WV 21) | Aqueous | No Particles | Black | 31-35 | 50-150 | ++ | +++ | +++ | 0.26 |
| Sipiol WL 2015-22P | Secondary door sealing, frameless doors, convertibles | EPDM, TPO, Sponge | 2K (WV 21) | Aqueous | 60 | Black | 34-39 | 150-300 | +++ | +++ | +++ | 0.16 |
| Sipiol WL 1025-21 | Secondary door sealing, frameless doors, convertibles | EPDM, Sponge | 1K | Aqueous | 60 | Black | 36.5-40.5 | 40-100 | +++ | +++ | +++ | 0.16 |
| Sipiol WL 1026-21 | Secondary door sealing, frameless doors, convertibles, sun roof, electric vehicles | EPDM, Sponge | 1K | Aqueous | 30 | Black | 36-40 | 50-150 | +++ | +++ | ++++ | 0.16 |
| Sipiol WL 1620-21 G | Anti-friction coatings for o-rings | EPDM | 1K | Aqueous | No Particles | Matte or Glossy Transparent | 31-36, 36-40 | 10-150, 50-250 | ++ | ++ | N/A | N/A |
| Autoseal RC-3007S | Door sealing, trunk-bonnet, hood sealing | Sponge | 3K (AS-3462B or AS-3463B) | Aqueous | 10 | Black | 28.5-32.5 | 200-1000 | ++++ | ++ | +++ | ++ |
| Autoseal RC-3007 Clear | Door sealing, trunk-bonnet, hood sealing | Sponge | 2K (AS-3462B or AS-3463B) | Aqueous | 10 | Hazy White | 27-31 | 100-600 | ++++ | + | ++ | ++ |
| Autoseal RC-3007 Black | Door sealing, trunk-bonnet, hood sealing | EPDM, Sponge | 2K (AS-3462B or AS-3463B) | Aqueous | 10 | Black | 27-31 | 100-800 | ++++ | + | ++ | ++ |
| Autoseal RC-2002/2100/2200/ Thinner | Door sealing, trunk-bonnet, hood sealing | EPDM, Sponge | 5K (RC-800B) | Solvent | 10 | Black | 15-20 | 10-500 | ++++ | + | ++ | ++++ |
| Autoseal RC-3011 Black | Door sealing, trunk-bonnet, hood sealing | EPDM, Sponge | 2K | Aqueous | 10 | Black | 27-31 | 100-600 | ++++ | + | ++ | +++ |
| Autoseal RC-3012 Clear | Door sealing, trunk-bonnet, hood sealing | EPDM, Sponge | 2K | Aqueous | 10 | Light Yellow | 27-31 | 100-600 | ++++ | + | ++ | +++ |

+ meets expectations ++ good +++ very good ++++ excellent





CROSS-LINKERS / ADHESION PROMOTERS / THICKENERS / SETTING AIDES

| PRODUCT | MAIN APPLICATION | SUBSTRATE | PROPOSED % IN WEIGHT | CURING REQUIREMENT, °C | POT LIFE |
|------------------|------------------------------------|---------------------|----------------------|------------------------|---|
| Sipiol WV 21 | Curative for 2K rubber coating | EPDM, Rubber, TPE | 3 | 25-200 | 8 hr at 25°C |
| Sipiol WV 22 | Curative for 2K rubber coating | EPDM, Rubber | 1K = 1-3 2K = 8 | 130-200 | No pot life limitation |
| Autoseal 3463B | Cross-linker for 2K rubber coating | EPDM, Rubber | 2.50 | 25-182 | |
| Sipiol HV 3 | Adhesion Promoter | EPDM, Rubber, TPE | 5-10 for all systems | N/A | Infinite pot life; can be used as a primer on TPE |
| Sipiol TH1 | Thickener | EPDM, Rubber, TPE | 0.2-2 | - | No pot life limitation |
| Sipiol WM 2 | Setting aide | all substrates | - | 25-180 | No pot life limitation |
| Autoseal RC-1500 | Additive for Autoseal RC-3007S | EPDM, Sponge | 10 | 180 | No pot life limitation |
| Autoseal RC-800B | Hardener | EPDM, Sponge, Solid | 5-10 | 100-150 | Based on situation |
| Autoseal RC-804B | Hardener | EPDM, Sponge, Solid | 5-10 | >150 | Based on situation |

PRIMER FOR COATINGS

| PRODUCT | MAIN SUBSTRATE | SOLVENT | COLOR | SOLIDS, % | MAIN APPLICATION |
|-------------------|--------------------|---|-----------------------|-----------|---|
| Chemlok 459X | TPE, TPO, EPDM | Xylene | Amber | 2.7-4.1 | Primer for coatings and flock adhesive |
| Autoseal RC-1017 | TPO or cured EPDM | Toluene | Clear/Tan | 3.0-5.0 | Primer for double layer tapes |
| Autoseal 459D | TPE, TPO, EPDM | Cyclohexane, MPK | Clear, Straw Yellow | 2.8-4.4 | Primer for coatings and flock adhesives |
| Autoseal RC-1028K | EPDM, TPO, PP | Methylcyclohexane, Butyl acetate, Ethanol, 2-Propanol | Light Yellow to Brown | 3.3-4.3 | Primer for coatings and flock adhesives |
| Sipiol WP 8555 | NR, HNBR and EPDMs | Water | Opaque Yellow | 7.0-9.0 | Primer for coatings and flock adhesives |
| Autoseal RC-1019 | TPO, PP, EPDM | Toluene, Isopropyl Alcohol, Cyclohexane | Clear/Tan | 2.7-3.7 | Primer for coatings and flock adhesives |
| Cuvertin X 8536 | EPDM | Xylene | Clear to Yellow | 1.8-2.2 | Primer for coatings and flock adhesives |
| Autoseal RC-1023 | PET, Urethane | Toluene | Light Amber | 6 | Primer |

FLOCK ADHESIVES

| PRODUCT | MAIN APPLICATION | 1K/2K | MAIN SUBSTRATE | SOLVENT | COLOR | SOLIDS, % | VISCOSITY mPa·s / cps except as noted | CURING, MIN | ADHESION | ABRASION | HUMIDITY STABILITY | SPECIFIC PROPERTIES |
|-----------------------|----------------------|-------|--|-------------------------------------|--------------------------|--------------------------------|---|--------------|----------|----------|-----------------------|-------------------------|
| Flocksil 1506 G 1 | Brush or spray | 1K | EPDM, NR, CR, SBR, TPO | Xylene, MIBK, Ethylacetate | Black | 40-44 | 40-100 | 2.5 @ 180°C | ++++ | ++++ | ++++ | Low temperature cure |
| Flocklok 852F | Inline or offline | 1K | EPDM, NR, CR, SBR | Xylene, Ethyl Benzene, Acetone | Brown | 52-56 | 50-100 seconds (Zahn #2) | 2 @ 204°C | +++ | +++ | +++ | Fast curing |
| Flocklok 7000/7204 | Brush or spray | 2K | PVC, Alcryin®, Sunprene®, nylon, ABS, etc. | 7000: MEK 7204: Xylene, Acetates | Clear, Amber- colored | 7000: 29-31 7204: 13.5-16.5 | 7000: 970-2500 7204: 15 | 3 @ 135°C | +++ | +++ | +++ | For specific substrates |
| Autoseal RC-3902H | Inline, drop or roll | 2K | TPO | Water | Light Yellow | 28.5-32.5 | 400-1000 | 5-10 @ 150°C | +++ | +++ | +++ | Water borne adhesive |

+ meets expectations ++ good +++ very good ++++ excellent

CUVERTIN® CATALYSTS

| PRODUCT | MAIN APPLICATION | SUBSTRATE | PROPOSED % IN WEIGHT | POT LIFE |
|------------------------|-----------------------------|-----------|----------------------|-------------------------|
| Cuvertin K 4 | Catalyst for flock adhesive | EPDM, TPO | 1-3 | 7 hr |
| Cuvertin K 8 | Catalyst for flock adhesive | EPDM, TPO | 1-3 | 2 hr |
| Flocklok Catalyst 9986 | Catalyst for flock adhesive | EPDM, TPO | 1-4 | No pot life limitation* |

*when not exposed to moisture



CHEMLOK® GLASS ENCAPUSLATION ADHESIVES

| PRODUCT | MAIN APPLICATION | 1K/2K | SOLVENT | COLOR | SOLIDS, % | VISCOSITY mPa·s / cps |
|--------------------------------|---|-------|---------------------------------|-------|-----------------------------|---------------------------------|
| Chemlok 487 A/B | Bond thermoplastic elastomers (TPE) to glass, metal and plastics during injection molding | 2K | A: Xylene B: MIBK | Clear | A: 12.6-15 B: 1-2 | A: 100-350 B: 1-10 |
| Chemlok 489/456 | Bond PVC to glass, metals and plastics during injection molding | 2K | 489: MIBK/Xylene 456: Xylene | Amber | 489: 9-11 456: 49-51 | 489: 80-195 456: <25 |
| Chemiok AP-133 | Bond unvulcanized silicone rubber to glass, metals, plastics and textiles | 1K | Methanol, Ethanol, Tolune | Clear | 4.8-6.2 | 0-5 |
| Chemlok 6150, Chemlok 8560S | Bond EPDM to glass during injection molding | 1K | 6150: Xylene 8560S: Water | Black | 6150: 21-25 8560S: 38-42 | 6150: 200-1000 8560S: 50-250 |

CHEMLOK® AND CUVERTIN® PRIMERS

| PRODUCT | MAIN SUBSTRATE | MAIN SUBSTRATE SOLVENT COLOR | | SOLIDS, % | MAIN APPLICATION |
|-----------------|--|------------------------------|---------------------|-----------|--|
| Chemlok 144 | Glass fabric, steel, aluminum, brass, e-coated metal, architectural and automotive glass, concrete and some plastics | Toluene, n-Butanol, Ethanol | Clear, Straw Yellow | 4.8-6.2 | Injection Molding |
| Chemlok AP-134 | Architectural and automotive glass, glass fabric, steel, aluminum, brass, e-coated metal, concrete and some plastics | Toluene, n-Butanol, Ethanol | Clear, Straw Yellow | 4.8-6.2 | Injection Molding |
| Cuvertin X 8536 | EPDM, PP, TPO, PE | Xylene | Clear to Yellow | 1.8-2.2 | Primer for coating and flock adhesives |

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SG1046E

08/22 Rev. 1

