



CHEMLOK[®]
Adhesives

SELECTOR GUIDE



For over 60 years, Chemlok® Adhesives have been providing high performance rubber-to-metal bonds that reduce risk and improve processes in industries like automotive, power generation, civil engineering, oil and gas, and industrial applications. Whatever your challenge, we can help.

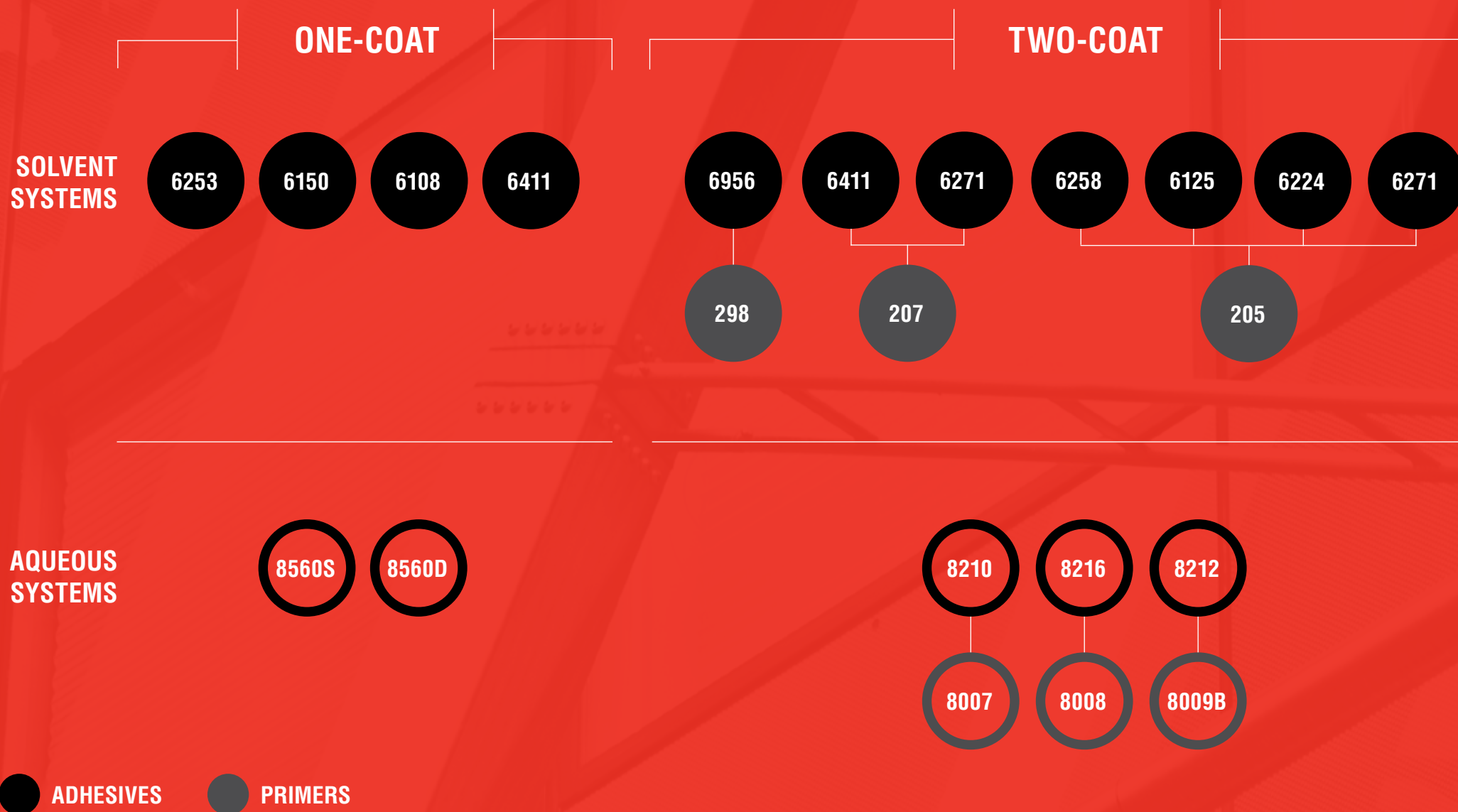
That's what makes Chemlok the ultimate in elastomer bonding. It's built on technology with generations of proven performance and delivered with uncompromising quality, service and performance.

LORD

GENERAL ELASTOMER SOLUTIONS

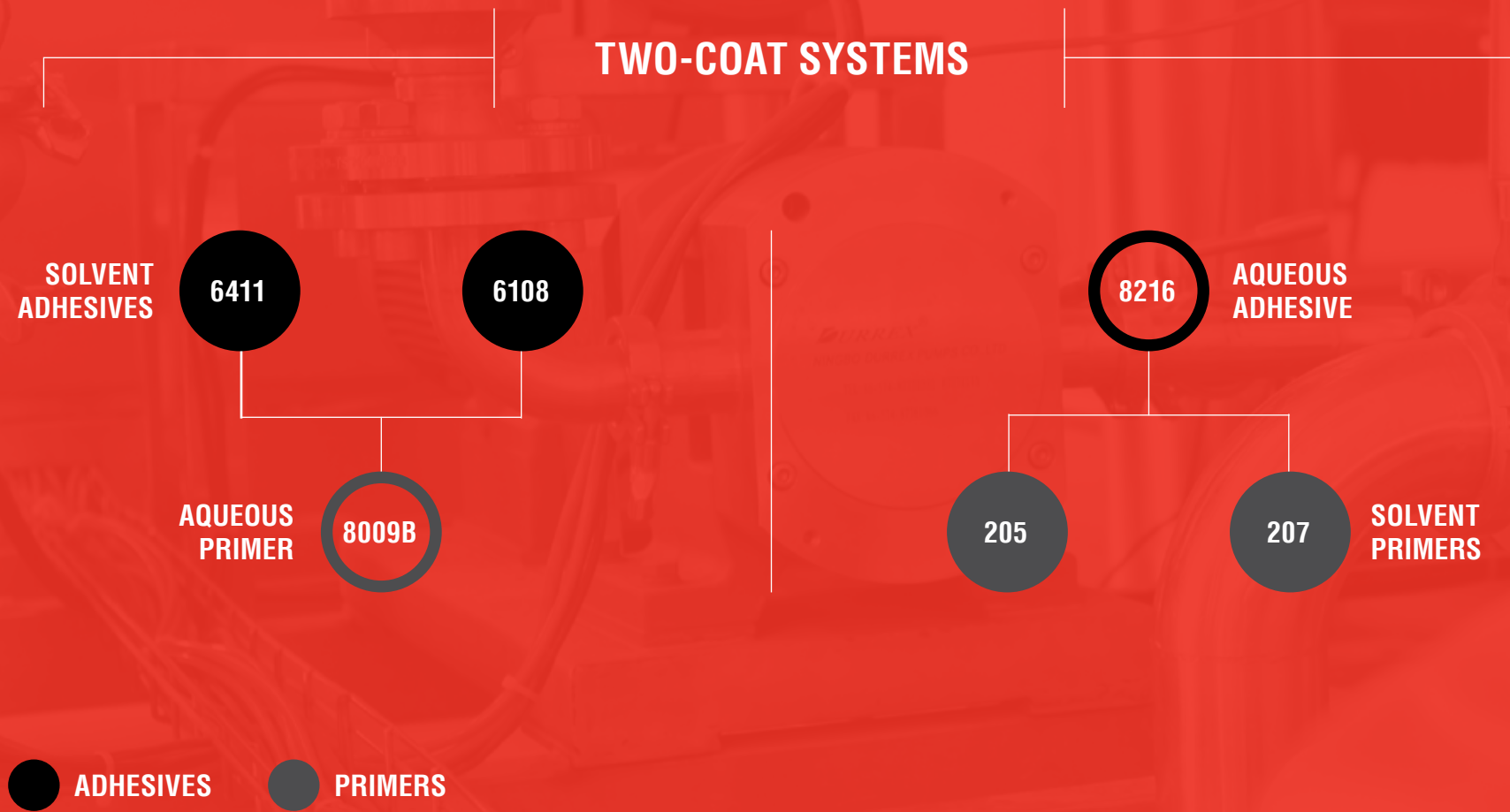
Typically the first choice for a bonding element is an elastomer. The type and details of its formulation will be based on the elastomer's intended function. Natural rubber and many synthetic elastomers make up the range of rubber polymers available. Things to consider when selecting an elastomer are performance requirements of the part, ease of mixing, processing and molding.





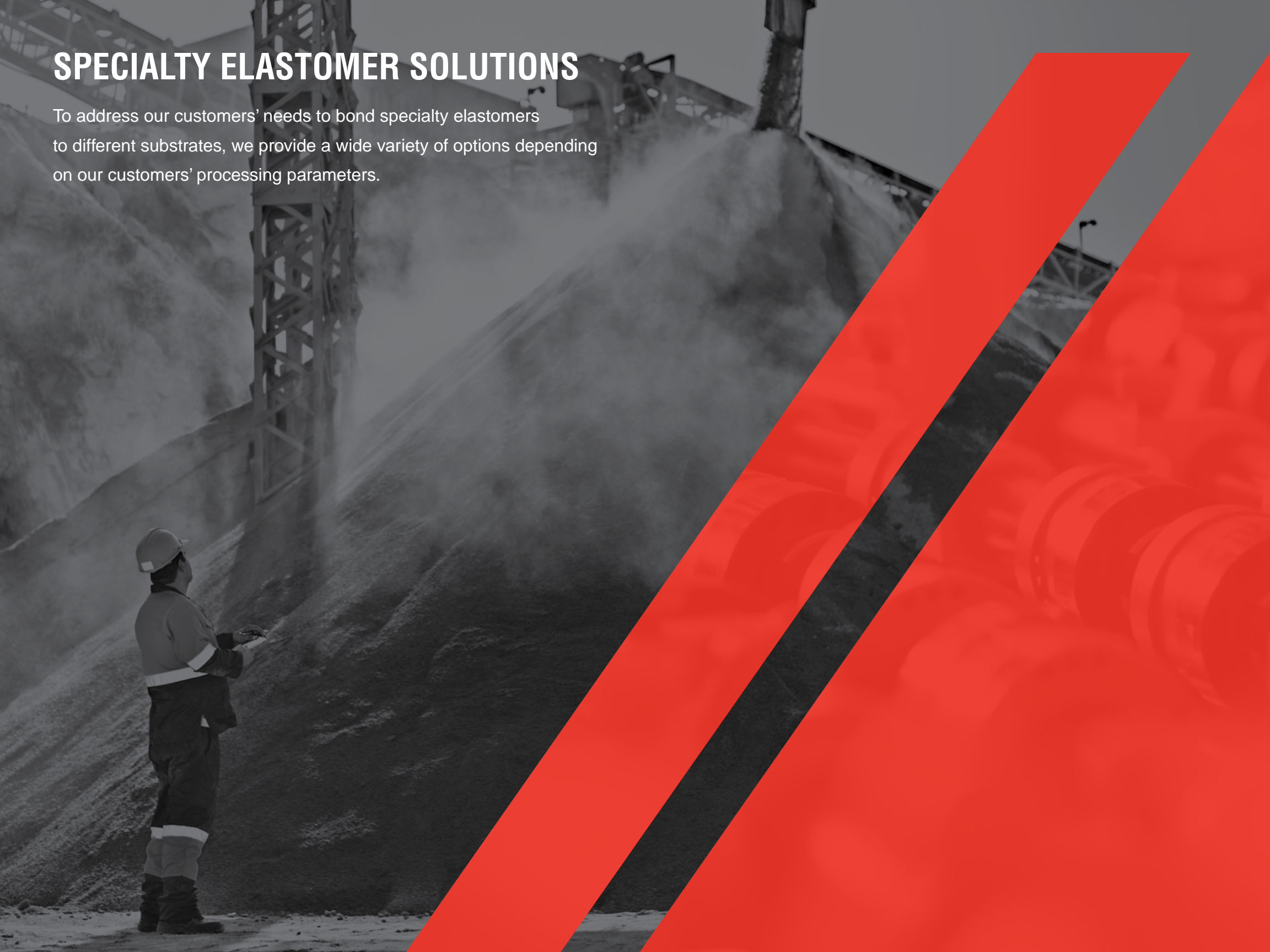
GENERAL ELASTOMER HYBRID SOLUTIONS

When you need an environmentally friendly adhesive that will bond a variety of natural and synthetic elastomers to primed metal, but don't have the resources to switch over to a fully aqueous system, look to our hybrid solutions. These environmentally friendly options will also bond cold-rolled steel, phosphatized steel, aluminum and other various substrates with the same level of performance that you have learned to trust.



SPECIALTY ELASTOMER SOLUTIONS

To address our customers' needs to bond specialty elastomers to different substrates, we provide a wide variety of options depending on our customers' processing parameters.



| | SOLVENT SYSTEMS | AQUEOUS SYSTEMS |
|---------------------------------------|---------------------------|-----------------|
| FLUOROCARBON (FKM) | 607 5150 5151 AP-133 | 8116 |
| SILICONES (PEROXIDE CURED) | 607 608 AP-133 | 8116 |
| POLYURETHANES (MILLABLE & CAST) | 213 218 219 | 8600 |
| POLYACRYLATE | 607 TY-PLY BN 6150 AP-133 | 610 |
| ETHYLENE ACRYLIC & EPICHLOROHYDRIN | 607 6150 | 610 8800 8560S |
| NBR/HNBR | TY-PLY BN 6150 6450 6125 | 8110 8560S |

| | | APPLICATION METHODS | | PERFORMANCE ATTRIBUTES | | | | | | | | | COMPATIBLE PRIMERS | | | | | |
|-------------------|-----------|---------------------|-------|------------------------|-----------|---------------|------------|----------|----------|----------------------|---------|-------|--------------------|--------------|-----|-----|------|-----|
| | | | | | | | | | | | | | | | | | | |
| | | CHEMLOK | SPRAY | DIP | MOLD FOUL | BOILING WATER | SALT SPRAY | PRE-BAKE | HEAT AGE | ELASTOMER ROBUSTNESS | LAYOVER | SWEEP | ONE-COAT | VOC FRIENDLY | 205 | 207 | 8009 | 298 |
| SOLVENT SOLUTIONS | 6150 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6125 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6411 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6108 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6253 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6258 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 6956 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | TY-PLY BN | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 607 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| AQUEOUS SOLUTIONS | 8560S | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 8560D | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 8116 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 8110 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | 610 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

●

 EXCELLENT

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 GOOD

●

 FAIR

●

 NOT RECOMMENDED

Choose your adhesive by the type of elastomer to be bonded. Refer to the Elastomer Bonding Guide within this document to make the correct selection. Also consider surface preparation; cure cycles; required environmental and chemical resistance; part geometry; color and conductivity requirements; and application methods which also affect the primer and adhesive choice. This guide lists the most common primers and adhesives. Contact the LORD Customer Support Center at +1 877 ASK LORD (275 5673) or your local distributor to assist you with selecting the appropriate adhesive for your application.

ELASTOMER BONDING GUIDE

| ELASTOMER | ADHESIVE | |
|---|------------------------------------|---------------------|
| | SOLVENT | AQUEOUS |
| BUTYL (IIR) | 6253, 6150, 6411*, 6108* | 8560S, 8210*, 8216* |
| CHLORINATED POLYETHYLENE (CPE) | 6253, 6150, 6411*, 6108* | 8560S |
| CHLOROSULFONATED POLYETHYLENE (CSM) | 6253, 6150, 6411*, 6108* | 8560S |
| ETHYLENE PROPYLENE DIENE MONOMER (EPDM) | 6253, 6150, 238(NW)*, 6411*, 6108* | 8560S, 8116** |
| EPICHLOROHYDRIN (CO) | 607, 6150, Ty-Ply BN | 8560S |
| ETHYLENE ACRYLIC | 607, 6150, 6125* | 610, 8800, 8560S |
| FLUOROCARBON (FKM) | 607, 5150, AP-133 | 8116** |
| NATURAL RUBBER (NR) | 6253, 6150, 6411*, 6108*, 6125* | 8560S, 8210*, 8216* |
| NITRILE (NBR) | 205, Ty-Ply BN, 6150, 6125* | 8110, 8116**, 8210* |
| HYDROGENATED NITRILE (HNBR) | 6450, 6254 | 8560S, 8116** |
| POLYACRYLATE (ACM) | 607, Ty-Ply BN, AP-133, 6150 | 610 |
| POLYBUTADIENE (BR) | 6253, 6150, 6411*, 6108* | 8560S |
| POLYCHLOROPRENE (CR) | 6253, 6150, 6411*, 6108* | 8560S, 8210*, 8216* |
| POLYISOPRENE (IR) | 6253, 6150, 6411*, 6108* | 8560S, 8210*, 8216* |
| POLYURETHANE (CAST AND MILLABLE) | 218, 213, 219 | 8600 |
| PVC | 485/44, 489/456 | |
| SILICONE (PEROXIDE CURE) | 607, 608, AP-133 | 8116** |
| STYRENE BUTADIENE (SBR) | 6253, 6150, 6411*, 6108* | 8560S, 8210*, 8216* |

* For solvent products, Chemlok 205 primer is recommended. For aqueous products, Chemlok 8009B primer is recommended. ** Peroxide cure elastomer

PRIMERS

| PRODUCT | DESCRIPTION | COLOR | VISCOSITY, CPS (EXCEPT AS NOTED) | FLASH POINT °C (°F) | DILUENT | SHELF LIFE |
|-----------|---|------------------------------|-------------------------------------|------------------------|---|------------|
| 144 | Solvent-borne primer with UV tracer | Clear, Straw Yellow | 1–8 centistokes | 1 (35) | Urethane Grade Toluene, Methanol, Ethanol | 1 year |
| 205 | General purpose primer/nitrile adhesive | Gray | 85–165 | 14 (57) | MIBK, MEK, Xylene | 1 year |
| 205LH | Low-HAP Chemlok 205 | Blue | 10–550 | 13 (56) | MPK | 6 months |
| 206 Blue | General purpose primer/adhesive | Blue | 25–250 | 19 (66) | MIBK, MEK, Xylene | 3 months |
| 207 | Heat-resistant primer | Gray | 70–450 | 14 (58) | MIBK, MEK | 6 months |
| 207LH | Low-HAP Chemlok 207 | Blue | 50–800 | 19 (67) | MAK, MPK | 6 months |
| 298 | High performance primer | Gray | <800 | 16 (61) | MIBK | 6 months |
| 459M | Primer for TPE/TPO/EPDM with UV tracer | Dark Amber | 25–30 seconds Zahn #1 | 9 (48) | — | 6 months |
| 459T | Primer for TPE/TPO/EPDM | Straw Yellow | 1–15 | 9 (48) | — | 6 months |
| 459X | Primer for TPE/TPO/EPDM | Amber | ≈ 10 | 27 (81) | — | 6 months |
| 7701 | Solvent-based surface treatment | Clear to Cloudy | — | -4 (25) | — | 6 months |
| 8006 | Environmentally resistant, aqueous primer | Gray | 15–100 | >93 (>200) | Deionized Water | 6 months |
| 8007 Blue | General purpose primer | Blue | 15–250 | >93 (>200) | Deionized Water | 3 months |
| 8008 | Aqueous primer | Green | 10–150 | >93 (>200) | Deionized Water | 6 months |
| 8009 | Aqueous primer | Gray | 10–100 | >93 (>200) | Deionized Water | 6 months |
| 8009B | Aqueous primer | Blue | 10–100 | >93 (>200) | Deionized Water | 6 months |
| AP-131 | Solvent-borne primer | Colorless to Slightly Yellow | 0–5 centistokes | 2.8 (37) | Toluene, Methanol, Ethanol | 1 year |
| AP-134 | Solvent-borne primer | Clear, Straw Yellow | 0–8 centistokes | 1 (35) | — | 1 year |
| EP5080-11 | Clear Chemlok 205 primer/nitrile adhesive | Hazy Amber | 28–35 seconds Zahn #1 | 15 (59) | MEK, MIBK | 1 year |

ONE-COAT SYSTEMS

| PRODUCT | DESCRIPTION | COLOR | VISCOSITY, CPS (EXCEPT AS NOTED) | FLASH POINT °C (°F) | DILUENT | SHELF LIFE |
|-----------|---|-----------------------------------|-------------------------------------|------------------------|---|----------------|
| 213 | Urethane-to-metal adhesive | Blue | 100–300 | 5 (41) | Chemlok 248 | 1 year |
| 217 | Adhesive for polychloroprene and nitrile elastomers | Black | 75–150 | -2 (28) | MEK/Xylene Mix | 1 year |
| 218 | General purpose adhesive | Clear to Slightly Hazy Amber | 750–1050 | 2 (36) | 1:1 Isopropanol: Toluene Blend or Glycol Ether Solvents | 1 year |
| 219 | Primer/castable urethane and TPU adhesive | Clear to Amber | 50–110 | 14 (58) | MIBK, Denatured Ethanol | 1 year |
| 402 | Rubber-to-textile adhesive | Black | 100–350 | 34.3 (93.7) | Xylene, Toluene | 6 months |
| 402X-HS | All-xylene Chemlok 402 | Black | 600–1100 | 25 (77) | Xylene | 6 months |
| 485/44 | Clear, two-part adhesive for bonding PVC | Clear to Amber/ Transparent Brown | 400–1000/ <10 | -4 (24)/29 (85) | Xylene | 1 year/ 1 year |
| 487 A/B | Clear, two-part adhesive for bonding TPE | Clear to Yellow/Clear to Cloudy | 100–350/1–10 | 27 (81)/ 15 (60) | Xylene, Toluene | 1 year/ 1 year |
| 489/456 | Fluorescing, two-part adhesive for bonding PVC | Clear to Amber/Light Amber | 80–195/ <25 | 16 (61)/27 (81) | Xylene, Toluene | 1 year/ 1 year |
| 607 | Adhesive for silicone/specialties | Clear to Slightly Yellow | — | 9 (49) | Methanol, Ethanol | 2 years |
| 608 | Adhesive for silicone | Clear to Hazy Yellow | — | 3 (38) | Methanol | 2 years |
| 610 | Aqueous, specialty elastomer adhesive | Orange to Red | — | >93 (>200) | Deionized Water | 2 years |
| 5150 | Adhesive for bonding fluoroelastomers to metal | Colorless to Pale Yellow | ≈ 2 centistokes | 6 (43) | Methanol, Ethanol | 1 year |
| 5151 | Adhesive for fluoroelastomers | Reddish-yellow | 25–30 seconds Zahn #1 | -5 (22) | MEK | 6 months |
| 6016 | Low-lead Chemlok 253 | Black | 35–100 seconds Zahn #3 | 27 (81) | Xylene, Toluene | 1 year |
| 6150 | Adhesive for metal and plastics | Black | 200–1000 | 27 (81) | Xylene | 6 months |
| 6250 | Low-lead Chemlok 250 | Black | 100–550 | 27 (81) | Technical Grade Xylene, Toluene | 6 months |
| 6253 | Low-lead Chemlok 253 | Black | 25–85 seconds Zahn #3 | 27 (81) | Xylene, Toluene | 6 months |
| 6254 | Heat- and oil-resistant adhesive | Black | 150–450 | 7 (44) | Xylene, Toluene | 6 months |
| 6260 | Non-black Chemlok 6254 | Brown | 100–600 | 6 (44) | Xylene, Toluene | 6 months |
| 6450 | High-temperature adhesive for HNBR/NBR | Green-Black | 5–100 | 0 (32) | MEK, Xylene | 6 months |
| 6451 | High-temperature adhesive for HNBR/NBR | Green-Black | 5–100 | -7 (18) | MEK, Xylene | 6 months |
| 8110 | Aqueous adhesive for nitrile | Black | <100 | >93 (>200) | Deionized Water | 6 months |
| 8116 | Aqueous adhesive | Black | 100–900 | >93 (>200) | Deionized Water | 6 months |
| 8560D | General purpose, aqueous adhesive | Black/Green | 100–500 | >93 (>200) | Deionized Water | 3 months |
| 8560S | General purpose, aqueous adhesive | Black | 50–250 | >93 (>200) | Deionized Water | 3 months |
| 8600 | Aqueous adhesive for castable urethane | White | 200–600 | >93 (>200) | Deionized Water | 6 months |
| AP-133 | Adhesive for silicone/specialties | Clear | ≈ 5 centistokes | 14 (57) | Toluene, Methanol, Ethanol | 1 year |
| EP6804-22 | Conductive, one-coat adhesive | Black | 50–250 | 9 (48) | Toluene, Xylene | 6 months |
| TY-PLY BN | Adhesive for nitrile | Black | 20–35 seconds FORD Cup #3 | 5 (42) | MEK, MIBK, Dry Alcohols | 1 year |
| Y-1540 | Adhesive for silicone/specialties | Red | ≈ 3 | 9.4 (49) | Methanol, Ethanol | 6 months |
| Y-1520A | Adhesive for silicone/specialties | Clear | <10 centistokes | 11 (52) | Methanol, Ethanol | 1 year |
| TS701-43 | Clear Chemlok 217 | Translucent Amber | 60–150 | -2 (28) | MEK | 1 year |

ADDITIVES/SOLVENTS

| PRODUCT | DESCRIPTION | COLOR | VISCOSITY, CPS (EXCEPT AS NOTED) | FLASH POINT °C (°F) | DILUENT | SHELF LIFE |
|-----------|--|-------|-------------------------------------|------------------------|-----------------------|------------|
| 248 | Thinner for Chemlok 213 | Blue | Water Thin | 3 (37) | MEK, Xylene, Acetates | 1 year |
| EP5081-40 | Flourescing additive for clear Chemlok adhesives | Clear | — | 11 (52) | — | 1 year |



TWO-COAT SYSTEMS

| PRODUCT | DESCRIPTION | COLOR | VISCOSITY, CPS (EXCEPT AS NOTED) | FLASH POINT °C (°F) | DILUENT | SHELF LIFE |
|-----------|--|-------------|-------------------------------------|------------------------|--|-------------------|
| 234B (NW) | General purpose adhesive | Black | 700–1500 | 28 (83) | Xylene, Trichloroethylene | 1 year |
| 234X (NW) | General purpose adhesive | Black | 400–1000 | 27 (81) | Xylene | 1 year |
| 236A | General purpose adhesive | Black | 300–700 | 22 (71) | Xylene, Toluene | 1 year |
| 236X | General purpose adhesive | Black | 125–500 | 30 (86) | Xylene, Toluene | 1 year |
| 238 (NW) | Adhesive for butyl and EPDM | Black | 150–800 | 33 (92) | Xylene | 1 year |
| 286 | Tacky tie cement for natural rubber | Black | 450–1200 | 4 (40) | Xylene, Toluene | 6 months |
| 289 | Primer for natural rubber lining | Green | 200–450 | 6 (42) | MEK/Xylene Mix | 1 year |
| 290 | Adhesive for natural rubber lining | Red | 20–50 | 7 (44) | Xylene, Toluene | 1 year |
| 2100/2101 | Low VOC tank lining primer/adhesive system | Blue/Black | 150–450/175–500 | 1.1 (34)/7 (44) | Xylene, MEK/Toluene | 6 months/6 months |
| 2332 | General purpose adhesive | Black | 100–300 | 27 (81) | Xylene | 9 months |
| 6100 | Low-lead Chemlok 252X | Black | 350–700 | 27 (81) | Xylene, Toluene | 1 year |
| 6108 | Low-lead Chemlok 252H | Black | 300–1000 | 27 (81) | Xylene, Toluene | 1 year |
| 6125 | Improved heat-resistant Chemlok 220 | Black | 70–200 | 27 (81) | Xylene, Toluene | 1 year |
| 6220 | Low-lead Chemlok 220 | Black | 100–300 | 27 (81) | Xylene, Toluene | 1 year |
| 6224 | High performance adhesive | Black | 100–300 | 27 (81) | Xylene | 1 year |
| 6225 | Low-lead Chemlok 225X | Black | 25–80 seconds Zahn #2 | 27 (81) | Xylene, Toluene | 1 year |
| 6254 | Heat- and oil-resistant adhesive | Black | 150–450 | 7 (44) | Xylene, Toluene | 6 months |
| 6258 | Low-lead, hard film Chemlok 252X | Black | 25–45 seconds Zahn #3 | 5 (41) | Xylene, Toluene | 1 year |
| 6271 | High performance adhesive | Black | 350–600 | 27 (81) | Xylene | 9 months |
| 6411 | Low-lead adhesive | Black | 200–600 | 25 (77) | Xylene, Toluene | 1 year |
| 6411LH | Low-HAP Chemlok 6411 | Black | 100–700 | 14 (58) | N-Butyl Propionate, Dimethyl Carbonate, Isopar E | 6 months |
| 6450 | High-temperature adhesive for HNBR/NBR | Green-Black | 5–100 | 0 (32) | MEK, Xylene | 6 months |
| 6451 | High-temperature adhesive for HNBR/NBR | Green-Black | 5–100 | -7 (18) | MEK, Xylene | 6 months |
| 6956 | High performance adhesive | Black | 300 | 16 (61) | Xylene | 6 months |
| 8210 | Aqueous adhesive | Black | 200–500 | >93 (>200) | Deionized Water | 6 months |
| 8212 | Aqueous adhesive | Black | 5–100 | >93 (>200) | Deionized Water | 6 months |



ISN'T NATURE BEAUTIFUL?

At LORD, we're constantly innovating new solutions to reduce our customers' carbon footprint. Our goal is to ensure our planet will be just as beautiful for future generations.

Not only are our Environmentally-Preferred Chemlok® Adhesives better for the environment, these adhesives perform at the same high quality you expect from the Chemlok brand. Whether your application requirements call for withstanding high temperatures or harsh environments — When it's critical, it's Chemlok.

Change is the only constant. Our team of experts strive to push the technical boundaries in order to provide you with tomorrow's solutions today. Our solutions have been successfully deployed for years across a wide range of industries. From the cars you drive to the tractor harvesting crops to put food on your table, you can depend on Chemlok Adhesives.

Values stated herein represent typical values as not all tests are run on each lot of material produced. For formalized product specifications or specific product end uses, contact the Customer Support Center.

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