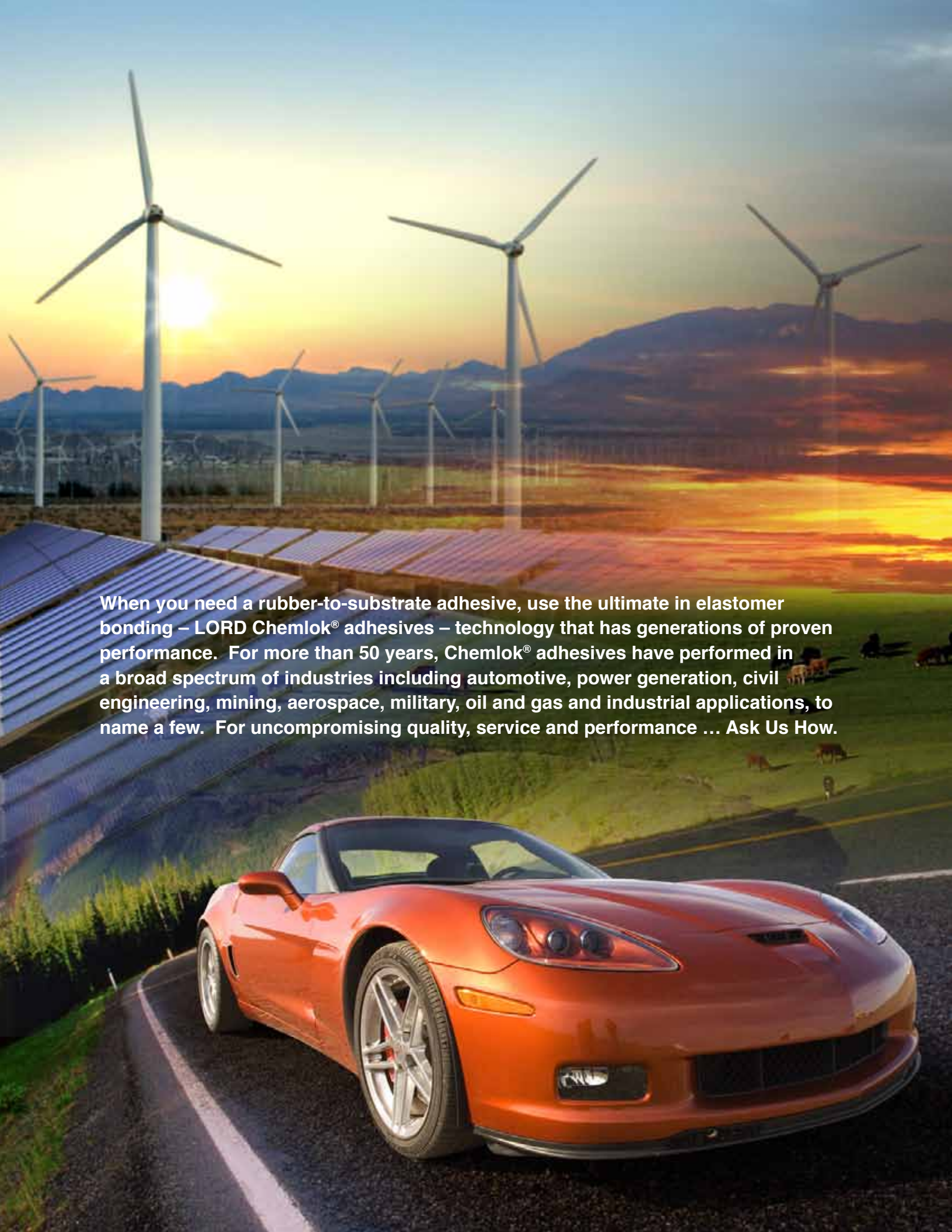


SELECTOR GUIDE



Chemlok[®] Adhesives

LORD
AskUsHow[™]



When you need a rubber-to-substrate adhesive, use the ultimate in elastomer bonding – LORD Chemlok® adhesives – technology that has generations of proven performance. For more than 50 years, Chemlok® adhesives have performed in a broad spectrum of industries including automotive, power generation, civil engineering, mining, aerospace, military, oil and gas and industrial applications, to name a few. For uncompromising quality, service and performance ... Ask Us How.

The type of elastomer to be bonded is the basis to select which adhesive to use. Refer to the Elastomer Bonding Guide within this document to make the correct selection. Surface preparation, cure cycles, required environmental and chemical resistance, part geometry, color and conductivity requirements, and application methods will also affect the primer and adhesive choice. This guide lists the most common primers and adhesives. For additional information, contact the LORD Customer Support Center at +1 877 ASK LORD (275 5673) or your local distributor to assist you with the adhesive selection process.

Elastomer Bonding Guide

| Elastomer | Traditional Solvent-Based, One-Coat | Traditional Solvent-Based, Two-Coat (Primer/Adhesive) | EPCA* Solvent-Based, One-Coat | EPCA* Solvent-Based, Two-Coat | Aqueous, One-Coat | Aqueous, Two-Coat (Primer/Adhesive) |
|---|---|---|--|---|-------------------------|---|
| Butyl Types (Bromobutyl and Chlorobutyl) | 250, 250X, 252X, 253X, 258XN, 6254 | 205/236A, 205/236X, 205/238, 205/250, 205/250X, 205/252X, 205/258XN | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 8650D, 8560S | 8007/8650D, 8007/8560S |
| Chlorinated Polyethylene | 250, 250X, 252X | 205/233X, 205/234B, 205/234X, 205/250, 205/250X, 205/252X | 6250, 6253, 6254, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/EP6804-22 | 8650D, 8560S | 8007/8650D, 8007/8560S |
| Chlorosulfonated Polyethylene | 250, 250X, 252X, 253X | 205/233, 205/233X, 205/234B, 205/234X | 6250, 6253, 6254 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254 | 8650D, 8560S | 8007/8650D, 8007/8560S |
| EPDM | 250, 250X, 252X, 253X, 258XN, 6254 | 205/238, 205/258XN, 207/259, 205/236A, 205/236X, 205/250, 205/250X, 205/252X | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 8650D, 8560S | 8007/8650D, 8007/8560S |
| Epichlorohydrin | 250, 250X, 607, Y-1520A, 5151, Ty-Ply BN | 205/233, 205/233X, 205/250, 205/250X | 6250, 607, Y-1520A, 5151 | 205/6250 | 610, 8560D, 8560S | 8007/8650D, 8007/8560S |
| Ethylene Acrylic | 205, 250, 250X, 252X, 607, Y-4310, 5151, Ty-Ply BN | 205/220, 205/220X, 205/233, 205/233X, 207/259 | 6250, 607, Y-4310, 5151 | 205/6125, 205/6220, 205/6250 | 610, 8560D, 8560S | 8007/8650D, 8007/8560S |
| Fluorocarbon | 607, Y-4310, 5150, 5151, AP-133, Y-1520A | -- | 607, Y-4310, 5150, 5151, AP-133, Y-1520A | -- | 8116 | 8006/8116 |
| Natural | 250, 250X, 252X, 253X, 258XN, 6254 | 205/220, 205/220X, 205/233, 205/233X, 205/234B, 205/234X, 207/259, 205/258XN | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 8560D, 8560S | 8006/8200, 8007/8210, 8007/8560D, 8007/8560S, 8008/8212 |
| Nitrile | 205, 217, 250, 250X, 252X, 253X, 258XN, 6254, Ty-Ply BN | 205/233, 205/233X, 205/234B, 205/234X, 205/258XN, 207/259 | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 610, 8110, 8560D, 8560S | 8006/8200, 8007/8210, 8007/8560D, 8007/8560S, 8008/8212 |
| Polyacrylate | 250, 217, 250X, 607, AP-133, Y-4310, Ty-Ply BN | 205/250, 205/217, 205/250X, 205/Ty-Ply BN | 6250, 607, AP-133, Y-4310 | 205/6250 | 610 | -- |
| Polybutadiene | 250, 250X, 252X, 253X, 6254 | 205/233, 205/233X, 205/234B, 205/234X | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | -- | -- |
| Polychloroprene | 250, 250X, 252X, 253X, 258XN, 6254 | 205/233, 205/233X, 205/234B, 205/234X, 205/258XN, 207/259 | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 8560D, 8560S | 8006/8200, 8007/8210, 8007/8560D, 8007/8560S, 8008/8212 |
| Polyisoprene | 250, 250X, 252X, 253X, 6254 | 205/220, 205/220X, 205/233, 205/233X, 205/234B, 205/234X, 205/236A, 207/259 | 6250, 6253, 6254, 6016, EP6804-22 | 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | 8560D, 8560S | 8006/8200, 8007/8210, 8007/8560D, 8007/8560S, 8008/8212 |
| PVC | 485/Curative 44, 489/456 | -- | -- | -- | -- | -- |
| Silicone (Peroxide Cure) | 607, 608, AP-133, Y-4310, Y-1540 | -- | 607, 608, AP-133, Y-4310, Y-1540 | -- | 8116 | -- |
| Styrene Butadiene | 250, 250X, 252X, 258XN, 253X | 205/220, 205/220X, 205/233, 205/233X, 205/234B, 205/234X, 205/250, 205/250X, 205/253X, 205/258XN, 207/259 | 6250, 6253, 6254, 6016, EP6804-22 | 205/6125, 205/6220, 205/6250, 205/6100, 205/6108, 205/6253, 205/6254, 205/6411**, 205/EP6804-22 | -- | -- |

* EPCA refers to Environmentally Preferred Coatings and Adhesives.

** Low HAP variations are available.

For high-temperature/harsh environments, substitute Chemlok 207 Primer for Chemlok 205 Primer. Exception: Chemlok 207 Primer cannot be used with Chemlok 217, 220, 220X, 6125 or 6220 adhesive or Ty-Ply BN adhesive.

Typical Properties of Chemlok® 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 |
| 218 | Urethane-to-metal adhesive | Clear to Slightly Hazy Amber | 750-1,050 | 2 (36) | 1:1 Isopropanol : Toluene Blend or Glycol Ether Solvents | 1 year |
| 219 | Primer/Castable Urethane and TPU adhesive | Clear to Amber | 50-120 | 14 (58) | Denatured Ethanol | 1 year |
| 250 | General purpose adhesive | Black | 200-550 | 33 (92) | Xylene, Toluene | 1 year |
| 250X | General purpose adhesive | Black | 100-550 | 28 (82) | Xylene, Toluene | 6 months |
| 252X | General purpose adhesive | Black | 20-40 seconds Zahn #3 | 26 (79) | Xylene, Toluene | 1 year |
| 252H | General purpose adhesive | Black | 500-2,000 | 9 (48) | Xylene, Toluene | 6 months |
| 253X | General purpose adhesive | Black | 40-90 seconds Zahn #2 | 27 (80) | Xylene, Toluene | 1 year |
| 253H | General purpose adhesive | Black | 300-2,000 | 9 (48) | Xylene, Toluene | 6 months |
| 256 | General purpose adhesive | Black | 100-350 | 7 (44) | Xylene, Toluene | 1 year |
| 258XN | Non-conductive general adhesive | Brown | 150-600 | 28 (85) | Xylene, Toluene | 6 months |
| 402 | Rubber-to-textile adhesive | Black | 100-350 | >93 (>200) | Xylene, Toluene | 6 months |
| 402X | Rubber-to-textile adhesive | Black | 600-1,100 | 25 (77) | Xylene, Toluene | 6 months |
| 485/44 | Clear, two-part for bonding PVC | Clear to Amber/ Transparent Brown | 400-1,000/<10 | -4 (24)/29 (85) | Xylene | 1 year/1year |
| 487 A/B | Clear, two-part for bonding TPE | Clear to Yellow/ Clear to Cloudy | 100-350/1-10 | 27 (81)/15 (60) | Xylene, Toluene | 6 months/ 6 months |
| 489/456 | Fluorescing two-part adhesive for bonding PVC | Clear to Amber/ Light Amber | 80-195/<8 | 16 (61)/27 (80) | Xylene, Toluene | 6 months/ 1year |
| 607 | Adhesive for Silicone/specialties | Colorless | -- | 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 |
| 855 | General purpose aqueous adhesive | Olive-green to Black | 20-200 | >93 (>200) | Deionized Water, Ethanol | 3 months |
| 5150 | Adhesive for bonding Fluoroelastomers to metal | Colorless to Pale Yellow | ≈ 2 centistokes | 6 (43) | -- | 1 year |
| 5151 | Adhesive for Fluoroelastomers | Reddish-yellow | 25-30 seconds Zahn #1 | -5 (22) | MEK | 6 months |
| 6016 | Low-lead Chemlok 253 type | Black | 35-100 seconds Zahn #3 | 27 (80) | Xylene, Toluene | 1 year |
| 6250 | Low-lead Chemlok 250 type | Black | 100-550 | 27 (80) | Technical Grade Xylene, Toluene | -- |
| 6253 | Low-lead Chemlok 253 type | Black | 10-46 seconds Zahn #3 | 27 (80) | Xylene, Toluene | 6 months |
| 6254 | Heat- and oil-resistant adhesive | Black | 150-450 | 7 (44) | Xylene, Toluene | 6 months |
| 6256 | Low-lead, hard film Chemlok 252X type | Black | 25-45 seconds Zahn #3 | 5 (41) | Xylene, Toluene | 1 year |
| 6260 | Non-black Chemlok 6254 type | Brown | 100-600 | 6 (44) | Xylene, Toluene | 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 | 48 (89) | Toluene, Xylene | 6 months |
| TS3505-3 | Butt splice adhesive for general purpose elastomers | Black | 100,000-400,000 | 9 (48) | Toluene | 1 year |
| Ty-Ply BN | Adhesive for Nitrile | Black | 20-35 seconds | 5.5 (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 | ≈ 3 centistokes | 11 (52) | Methanol, Ethanol | 1 year |
| 217 | Adhesive for Polychloroprene and Nitrile elastomers | Black | 75-150 | -2 (28) | MEK/Xylene Mix | 1 year |
| TS701-43 | Clear version of Chemlok 217 | Translucent Amber | 60-150 | -2 (28) | MEK | 1 year |

Typical Properties of Chemlok® Two-Coat Systems

| Product | Description | Color | Viscosity, cps (except as noted) | Flash Point °C (°F) | Diluent | Shelf Life |
|---------|---|-------------|-------------------------------------|------------------------|--|------------|
| 220 | General purpose adhesive | Black | 135-300 | 28 (83) | Xylene, Toluene | 2 years |
| 220X | General purpose adhesive | Black | 70-200 | 27 (81) | Xylene, Toluene | 1 year |
| 225X | General purpose adhesive | Black | 50-200 | 27 (81) | Xylene, Toluene | 6 months |
| 233 | General purpose adhesive | Black | 100-300 | 33 (92) | Xylene, Toluene | 1 year |
| 233X | General purpose adhesive | Black | 30-60 seconds Zahn #2 | 27 (81) | Xylene, Toluene | 6 months |
| 234B | General purpose adhesive | Black | 450-900 | 28 (83) | Xylene, Toluene | 1 year |
| 234X | General purpose adhesive | Black | 300-600 | 27 (81) | Xylene, Toluene | 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 | Adhesive for Butyl & EPDM | Black | 200-800 | 33 (92) | Xylene, Toluene | 1 year |
| 259 | General purpose adhesive | Green-Black | 100-500 | 6.6 (44) | Xylene, Toluene | 6 months |
| 286 | Tacky tie cement for Natural Rubber | Black | 450-1,200 | 4 (40) | Xylene, Toluene | 6 months |
| 289 | Primer for Natural Rubber lining | Green | 20-450 | 6 (42) | -- | 1 year |
| 290 | Adhesive for Natural Rubber lining | Red | 20-50 | 7 (44) | Xylene, Toluene | 1 year |
| 950 | General purpose adhesive | Black | 250-1,500 | 16 (61) | Xylene, Toluene, MIBK | 6 months |
| 6100 | Low-lead Chemlok 252X type | Black | 350-800 | 27 (81) | Xylene, Toluene | 1 year |
| 6108 | Low-lead Chemlok 252H type | Black | 30-74 seconds Zahn #4 | 27 (80) | Xylene, Toluene | 1 year |
| 6125 | Improved heat-resistance Chemlok 220 type | Black | 70-300 | 27 (81) | Xylene, Toluene | 1 year |
| 6220 | Low-lead Chemlok 220 type | Black | 100-300 | 27 (81) | Xylene, Toluene | 1 year |
| 6225 | Low-lead Chemlok 225X type | Black | 25-80 seconds Zahn #2 | 27 (80) | Xylene, Toluene | 1 year |
| 6411 | Low-lead adhesive* | Black | 200-600 | 25 (77) | -- | 1 year |
| 6411LH | Low-HAP Chemlok 6411 | Black | 200-600 | 14 (58) | T-Butyl Acetate, Dimethyl Carbonate | 6 months |
| 8210 | Aqueous adhesive | Black | 200-500 | >93 (>200) | Deionized Water | 6 months |
| 8212 | Aqueous adhesive | Black | 25-500 | >93 (>200) | Deionized Water | 6 months |

* While not intentionally formulated into the product, lead can sometimes be a trace contaminant in raw materials (e.g., mineral fillers) and may be detectable in random sampling at very low levels (generally less than 100 ppm).

Typical Properties of Chemlok® Primers

| Product | Description | Color | Viscosity, cps (except as noted) | Flash Point °C (°F) | Diluent | Shelf Life |
|-----------|---|------------------------------|-------------------------------------|------------------------|--|------------|
| 205 | General purpose primer/ Nitrile adhesive | Gray | 85-165 | 19 (66) | MIBK, MEK | 1 year |
| 205LH | Low-HAP Chemlok 205 | Blue | 10-550 | 13 (56) | MPK | 6 months |
| 207 | Heat-resistant primer | Gray | 70-450 | 14 (58) | MIBK, MEK | 6 months |
| 2000 | General purpose primer/Nitrile adhesive | Blue | 10-250 | 19 (66) | MIBK, MEK | 6 months |
| 207LH | Low-HAP Chemlok 207 | Blue | 50-800 | 19 (67) | MAK, MPK | 6 months |
| 901 | Solvent-based primer for Chemlok 950 | Gray | 25-425 | 16 (61) | MIBK | 6 months |
| 8006 | Environmentally-resistant aqueous primer | Gray | 15-100 | >93 (>200) | Deionized Water | 6 months |
| 8007 | General purpose primer | Gray | 20-250 | >93 (>200) | Deionized Water | 3 months |
| 8008 | Aqueous primer | Green | 10-250 | >93 (>200) | Deionized Water | 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 | -- | -- | -- | 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 Yellow to Amber | 0-8 centistokes | 1.6 (35) | -- | 1 year |
| 144 | Solvent-borne primer with UV tracer | Clear, Light Straw | 1-8 centistokes | 1.6 (35) | Technical Grade Toluene, Methanol, Ethanol | 1 year |
| EP5080-11 | Clear Chemlok 205 primer/Nitrile adhesive | Hazy Amber | 28-35 seconds Zahn #1 | 15 (59) | MEK, MIBK | 1 year |

Typical Properties of Chemlok® Additives/Solvents

| Product | Description | Color | Viscosity, cps (except as noted) | Flash Point °C (°F) | Diluent | Shelf Life |
|-----------|--|-------|-------------------------------------|------------------------|---------|------------|
| EP5081-40 | Fluorescing additive for clear Chemlok adhesives | Clear | -- | 11 (52) | -- | 1 year |
| 248 | Thinner for Chemlok 213 | Blue | Water Thin | 3 (37) | -- | 1 year |

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

Information provided herein is based upon tests believed to be reliable. In as much as LORD Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, LORD Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party, including but not limited to any product end-user. Nor does the company make any express or implied warranty of merchantability or fitness for a particular purpose concerning the effects or results of such use.

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LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide ... Ask Us How.

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