UL Compounds
Certifiably perfect solutions.

All Seals is pleased to offer these UL rubber compounds, all of which have been tested and recognized under Underwriters Laboratories’ Category JMLU2, “Gasket and Seal Materials – Components”. General information regarding the end use applications and physical properties of each compound is outlined inside this brochure.

UL is an independent product safety testing and certification organization. To learn more about specific UL compounds, please visit www.allsealsinc.com/certified-compounds.com. For additional information or expert advice, contact us and speak directly to an experienced compound professional. Please call us at 800.553.5054, or visit our website at www.allsealsinc.com.

ALL SEALS’ UL LINEUP

O-RINGS & BACK-UP RINGS
We have a UL recognized compound O-Ring to match virtually every application you need – or we’ll customize it for special applications. We also offer extrusion-resistant back-up rings to ensure seal protection.

CUSTOM MOLDED SHAPES
When the need is for durable non-seal type molded parts made with UL recognized compounds, All Seals can help. For bumpers, caps, gaskets, bellows, handles, washers, gaskets and more, we deliver the solution.

FABRIC REINFORCED DIAPHRAGMS
Diaphragms offer several benefits like no sliding and static friction, no need for lubrication, simple assembly and more. All Seals offers UL recognized fabric reinforced diaphragms to meet these demands.

METAL-TO-RUBBER SHAPES
Seals come in all shapes and sizes for countless applications. Over our decades of experience, we’ve seen and sourced them all. We’ve got the metal-to-rubber seal and shape you need – and UL recognized.

UL recognized seals of approval.

Underwriter Laboratories is an independent product safety testing and certification organization. Its product recognition is a standard for virtually all industries and it’s your assurance of All Seals’ tested and verified quality for the specified applications.

All Seals offers a wide variety of UL recognized rubber compounds to match numerous different applications. Our selection of fluorinated and nitrile compounds meets the demands of several petroleum category applications from natural gas to diesel/biodiesel blends, plus other application categories such as ozone and rubber-to-metal bonding. All of our fluorocarbon compounds are formulated with genuine Chemours’™ Viton™ for high temperature and extremely corrosive environments. The EPDM compounds are recognized for extinguishing agents, detergents, ozone, swimming pool pumps and more.

For more information on UL compounds contact All Seals. We can help you find the perfect UL compound for your application.
FLUORINATED COMPOUNDS

FLT-7001: 75 DUROMETER FLUOROCARBON
Chemours™ Viton™ GFLT is a premium APA grade of fluorocarbon material that offers the best all-round performance in terms of physical properties, low temperature sealing ability and chemical resistance. It can also be bonded to both metal and fabric.

USE: B, C, D, E, F, G, H, J, N, O, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 25

UL Tested Physical Properties:
- Maximum Service Temperature: 200°C
- Minimum Service Temperature: -60°C
- Hardness Range: 75 - 85
- Tensile Strength: 2163 psi
- Elongation: 229%
- Maximum Compensation Set: 10.7%
- Maximum Tensile Set: 4%

F-7041: 75 DUROMETER FLUOROCARBON
This compound is based on Chemours™ Viton™ B polymer. Viton™ B offers improved chemical resistance over standard A grades at a lower cost than the GF or GFLT based Vitons™.

USE: B, C, D, F, G, H, J, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 24, 25

UL Tested Physical Properties:
- Maximum Service Temperature: 200°C
- Minimum Service Temperature: -40°C
- Hardness Range: 74 - 84
- Tensile Strength: 1715 psi
- Elongation: 148%
- Maximum Compensation Set: 10.7%
- Maximum Tensile Set: 2%

F-7027: 75 DUROMETER FLUOROCARBON
This material is recognized for use in gasoline, gasoline/alcohol blends, kerosene, natural gas, LP gas and diesel fuel, as well as UL 50/50E electrical enclosures. It also exhibits a very low compression set. F-7027 is formulated from genuine Chemours™ Viton™.

USE: B, C, D, F, G, H, J, N, O, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 25

UL Tested Physical Properties:
- Maximum Service Temperature: 200°C
- Minimum Service Temperature: -40°C
- Hardness Range: 63 - 73
- Tensile Strength: 1107 psi
- Elongation: 215%
- Maximum Compensation Set: 4.3%
- Maximum Tensile Set: 2%

FS-7002: 75 DUROMETER FLUOROSILICONE
This UL fluorosilicone provides exceptional sealing capability in extremely low service temperatures. Coupled with UL 50/50E electrical enclosures, it makes an excellent environmental seal due to its extreme cold temperature flexibility and resistance to both ozone and UV light.

USE: B, C, D, G, 3, 4, 5, 9, 10, 12, 14, 15, 25

UL Tested Physical Properties:
- Maximum Serv Temperature: 80°C
- Minimum Serv Temperature: -55°C
- Hardness Range: 63 - 73
- Tensile Strength: 1107 psi
- Elongation: 215%
- Maximum Comp Set: 4.3%
- Maximum Tensile Set: 2%

F-7036: 75 DUROMETER FLUOROCARBON
This is All Seals’ standard stocked UL Viton™ A material. The compound offers numerous UL recognitions, primarily focused on the fuel dispensing market. As a member of the A family, it offers the best physical properties of the available Viton™ grades.

USE: B, C, D, F, G, H, J, N, O, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 26

UL Tested Physical Properties:
- Maximum Service Temperature: 200°C
- Minimum Service Temperature: -25°C
- Hardness Range: 75 - 85
- Tensile Strength: 2278 psi
- Elongation: 201%
- Maximum Compensation Set: 5.3%
- Maximum Tensile Set: 4%

F-7020: 75 DUROMETER FLUOROCARBON
This compound is based on our F-7036 Viton™ material. However, it has been specifically formulated to facilitate bonding to various types of metals and plastics. This can reduce costs by allowing All Seals to supply a complete seal, rather than relying on more expensive seal capture methods like dovetail grooves or chemical adhesives.

USE: B, D, E, F, G, H, J, N, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 26

UL Tested Physical Properties:
- Maximum Service Temperature: 200°C
- Minimum Service Temperature: -40°C
- Hardness Range: 76 - 86
- Tensile Strength: 1822 psi
- Elongation: 254%
- Maximum Compensation Set: 19%
- Maximum Tensile Set: 6%

Viton™ is a trademark of The Chemours Company FC, LLC.
NITRILE COMPOUNDS

N-7026: 70 DUROMETER NITRILE
This material is recognized for use in manufactured or natural gas, diesel fuel and liquefied petroleum gas (LP gas). It’s also suitable for use in UL 262 appliances (gate valves for fire protection service).

USE: F, G, J, 2, 3

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 69 - 79
- Tensile Strength: 2044 psi
- Elongation: 302%
- Maximum Compensation Set: 10.8%
- Maximum Tensile Set: 3%

N-7079: 70 DUROMETER NITRILE
N-7079 is All Seals’ original fuel resistant UL nitrile. The compound’s high acrylonitrile content affords for good resistance to both fuels and oils.

USE: B, D, F, G, J, 1, 3, 4, 5, 6, 7, 8, 12, 14, 15, 25, 26, 27

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 69 - 79
- Tensile Strength: 1662 psi
- Elongation: 279%
- Maximum Compensation Set: 12.3%
- Maximum Tensile Set: 2%

N-7088: 70 DUROMETER NITRILE
This is All Seals’ general purpose UL nitrile compound. With a normal acrylonitrile content, it is suitable for less aggressive fuels such as diesel and LP gas. It’s a more economical alternative for UL applications that don’t require gasoline resistance.

USE: F, G, J, 3

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 65 - 75
- Tensile Strength: 2209 psi
- Elongation: 320%
- Maximum Compensation Set: 8.8%
- Maximum Tensile Set: 2%

N-7099: 70 DUROMETER NITRILE
N-7099 compound is very similar to N-7088, however it offers additional UL recognized end uses for pumps and mechanical seals.

USE: E, F, G, J, 21, 22

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 69 - 79
- Tensile Strength: 2084 psi
- Elongation: 302%
- Maximum Compensation Set: 10.8%
- Maximum Tensile Set: 3%

N-7575: 75 DUROMETER NITRILE
Based on All Seals’ N-7079 material, this compound offers several improvements over N-7079, most notably N-7575’s UL recognition for methanol/gasoline fuel blends.

USE: B, C, D, F, G, J, 4, 5, 12, 14, 15, 20, 25

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 70 - 80
- Tensile Strength: 1662 psi
- Elongation: 279%
- Maximum Compensation Set: 12.3%
- Maximum Tensile Set: 2%

N-8002: 80 DUROMETER NITRILE
N-8002 is recognized for use in manufactured or natural gas, diesel fuel, and liquefied petroleum gas (LP gas). It has a very good compression set and tensile strength.

USE: F, G, J, 3

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 76 - 86
- Tensile Strength: 2350 psi
- Elongation: 260%
- Maximum Compensation Set: 6.8%
- Maximum Tensile Set: 2%

N-8007: 80 DUROMETER NITRILE
N-8007 is very similar to the performance of N-7088, however this compound is 10 points harder in durometer. It’s excellent for bridging a 70 to 90 durometer gap, especially in terms of sealing capability and wear resistance. It’s also an excellent choice for a sealing seat.

USE: F, G, J, 3

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 75 - 85
- Tensile Strength: 2350 psi
- Elongation: 148%
- Maximum Compensation Set: 8.3%
- Maximum Tensile Set: 3%

N-9006: 90 DUROMETER NITRILE
A specially formulated UL 90 durometer material for diesel and fuel gas sealing applications, this compound is formulated for improved low temperature flexibility over standard NBR 90 grade elastomers.

USE: F, G, J, 3

UL Tested Physical Properties:
- Maximum Service Temperature: 60°C
- Minimum Service Temperature: -40°C
- Hardness Range: 76 - 86
- Tensile Strength: 2350 psi
- Elongation: 148%
- Maximum Compensation Set: 8.3%
- Maximum Tensile Set: 3%

EPDM COMPOUNDS

E-7049: 70 DUROMETER EPDM
This specialty UL material features various unique end uses. Primary markets are pool and commercial/consumer dish-washing applications. Also, its UL 50/50E recognition could make it the right sealing gasket material choice for specialized applications.

USE: A, L, M, N, O, 4, 5, 18, 19

UL Tested Physical Properties:
- Maximum Service Temperature: 105°C
- Minimum Service Temperature: -50°C
- Hardness Range: 71 - 81
- Tensile Strength: 2795 psi
- Elongation: 110%
- Maximum Compensation Set: 3.7%
- Maximum Tensile Set: 2%
The final acceptance of a gasket material in a specific end-use application is dependent on its installation and use, and may require additional evaluation with respect to ingress or leakage of solids (such as dusts), liquids or gases, or other features dependent on the design and construction of the equipment in which it is used.

A. Extinguishing agents
B. Gasoline
C. Gasoline/alcohol blends up to 15% alcohol
D. Naphtha or kerosene
E. MPS gas
F. Manufactured gas or natural gas
G. Diesel fuel, fuel oil or lubricating oil
H. Heated fuel oil
I. Anhydrous ammonia
J. Liquefied petroleum gas (LP-gas)
K. Dry-cleaning agents
L. Laundry detergents
M. Dishwashing detergents
N. Atmospheric ozone
O. Generated ozone

1. Suitable for use with gasoline/ethanol blends having an ethanol content up to 25% (E25) for static applications.
2. Suitable for use in UL 262 appliances.
3. See the Guide Information for alphabetical end-use application codes.
4. Suitable for use in UL 50 "Enclosures for Electrical Equipment", (including oil immersion) gasket applications.
5. Suitable for use in UL 50E (periodic recompression) "Enclosures for Electrical Equipment, Environmental Considerations", (including oil immersion) gasket applications.
6. Suitable for use with gasoline/ethanol blends having an ethanol content up to 85% (E85) for static applications.
7. Suitable for use with gasoline/ethanol blends having an ethanol content up to 85% (E85) for dynamic applications.
8. Suitable for use with gasoline/ethanol blends having an ethanol content up to 25% (E25) for dynamic applications.
9. Suitable for use with diesel exhaust fluid for static applications, UL 87C and UL 2586C.
10. Suitable for use with diesel exhaust fluid for dynamic applications, UL 87C and UL 2586C.
11. Suitable for use with biodiesel fuel for dynamic applications, UL 87B.
12. Suitable for use in gasoline/ethanol blends having an ethanol content up to 85% (E0 - E85) for dynamic applications, UL 87A and UL 2586A.
13. Suitable for use with biodiesel fuel for static applications, UL 87B.
14. Suitable for use in gasoline/ethanol blends having an ethanol content up to 85% (E0 - E85) for static applications, UL 87A and UL 2586A.
15. Suitable for use in diesel fuel, biodiesel fuel, diesel/biodiesel blends with nominal biodiesel concentrations up to 20% (B20), kerosene, and fuel oil for dynamic applications, UL 87B and UL 2586B.
16. Suitable for 0-20 percent MTBE/gasoline blends.
17. Suitable for 0-20 percent ETBE/gasoline blends.
18. Suitable for vapor extinguishing agents only.
19. Suitable for use as gaskets in swimming pool pumps, filters and chlorinators (UL 1081).
20. Suitable for 100% MTBE.
21. Suitable for use as gaskets in enclosures for electrical equipment (UL 50), electrical equipment, environmental considerations-continuous compression (UL 50E), & pool pumps, filters & chlorinators (UL 1081).
22. Suitable for use as gaskets in motor-operated water pumps (UL 77B).
23. Suitable for 100% ETBE.
24. Suitable for 0-20 percent TAME/gasoline blends.
25. Suitable for use in diesel fuel, biodiesel fuel, diesel/biodiesel blends with nominal biodiesel concentrations up to 20% (B20), kerosene, and fuel oil for static applications, UL 87B and UL 2586B.
26. Gasoline/alcohol blends up to 15% ethanol.
27. Extinguishing agents are dry chemical and water.
WARRANTIES   All Seals, Inc. warrants the products to be free of defects in materials and workmanship (as defined by the engineering print or standard industry specification) for a period of ninety (90) days. Should the product(s), in All Seals’ opinion, malfunction during the warranty period, All Seals, Inc. will, at its option, repair or replace the defective product(s) at no charge provided that the product(s) have not been subjected to misuse, abuse, or non-All Seals-authorized alternations, modifications, or repairs. All Seals, Inc. provides only the warranties set forth herein. All other warranties, expressed or implied, including but not limited to the warranties of merchantability and fitness for a particular purpose, are excluded in the event the product(s) provided herein malfunction. Buyer’s sole remedy shall be repair or replacement as provided above. Under no circumstances shall All Seals, Inc. be liable in any way to the buyer or user for any damages, including any lost profits or other indirect, special, incidental or consequential damages of any kind or nature, arising out of use of, or inability to use such product.