



## Compressed Non-Asbestos

Early efforts to replace asbestos resulted in the introduction and testing of compressed non-asbestos products in the 1970's. Many of these products have seen extensive use since that period, however there have been enough problems to warrant careful consideration in choosing a replacement material for compressed asbestos. Most manufacturers of non-asbestos sheet materials use synthetic fibers, like aramid or Kevlar®, in conjunction with an elastomeric binder. The elastomeric binder makes up a larger percentage of this sheet and thereby becomes a more important consideration when determining applications.

Note: Kevlar® is a registered trademark of DuPont.

### L420

L420 is a general purpose sheet jointing material with good mechanical properties. Constructed with aramid/ organic fiber and a high quality nitrile rubber binder.

Creep Relaxation	ASTM F-38B (1/32")	30%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	25 MPa
Sealability	ASTM F-37A (1/32")	0.25 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 15%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	25% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712111E12M4
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	Green	
Pressure Range	Vacuum to 580 psi (40 Bar) @ 1/16" thickness and below	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Temperature Limits	-40°F to 356°F (-40°C to 180°C)	

#### Applications and Characteristics:

- Used successfully in mild organic and inorganic acids
- Diluted alkalis
- General chemicals
- Synthetic oils
- Petroleum and petroleum derivatives

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



# L430

L430 is a general purpose sheet jointing material with superior mechanical properties. Constructed with premium aramid fiber and a high quality nitrile rubber binder.

### Applications and Characteristics:

- Used successfully in mild organic and inorganic acids
- Diluted alkalis
- General chemicals
- Synthetic oils
- Petroleum and petroleum derivatives

**Note:** Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.

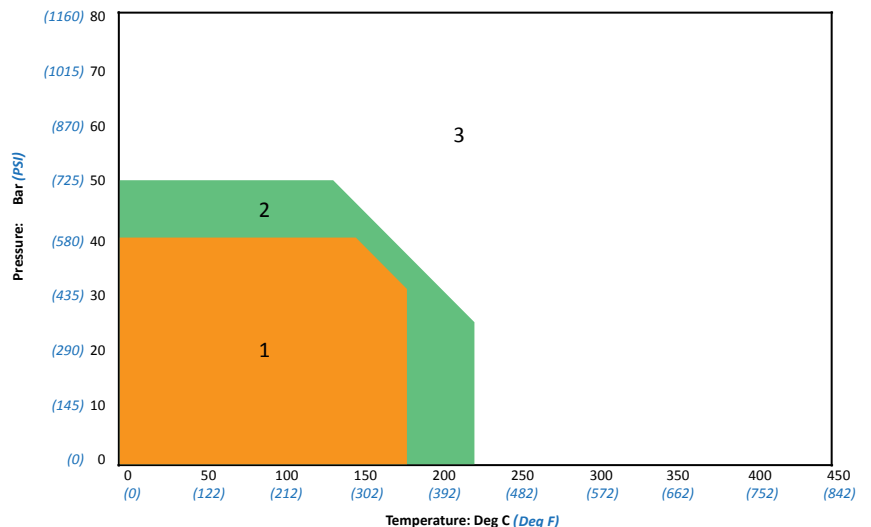


Creep Relaxation	ASTM F-38B (1/32")	25%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	25 MPa
	BS7531 (40 MPa @ 300°C)	16 MPa
Sealability	ASTM F-37A (1/32")	0.25 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	15% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F7121   I   E12M4
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	14 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	Green	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Temperature Limits	-40°F to 428°F (-40°C to 220°C)	
Maximum Pressure	50 Bar (725 PSI)	

All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

L430 PRESSURE / TEMPERATURE GRAPH



# L433

L433 is a premium sheet gasket material with a reinforcement structure consisting of glass and aramid fibers, it is bound together with a high quality nitrile rubber binder. L433 has excellent resistance to steam due to the addition of glass fiber.

Creep Relaxation	ASTM F-38B (1/32")	20%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	32 MPa
	BS7531 (40 MPa @ 300°C)	27 MPa
Sealability	ASTM F-37A (1/32")	0.25 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	15% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712132B3E21M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM DI49-95a	18 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		100 lbs/ft <sup>3</sup> (1.6 g/cc)
Color	Red/Brown	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AX" API 607 Fire Safe	
Temperature Limits	-150°F to 800°F (-100°C to 425°C)	
Maximum Pressure	80 Bar (1160 PSI)	

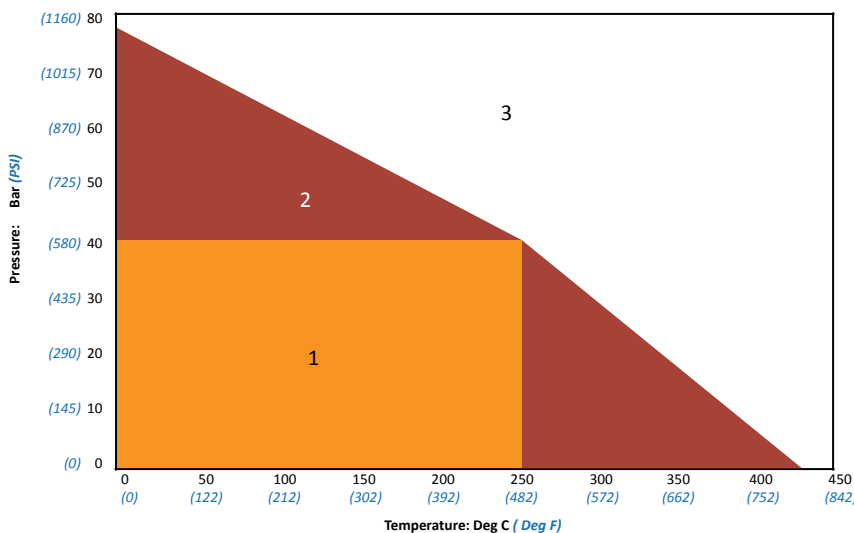
### Applications and Characteristics:

- Excellent sealing ability, high resistance to creep
- Good steam resistance
- Stronger acids and alkalis, inert gases, general chemicals, oils and fuels
- Petroleum and petroleum derivatives

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



L433 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

# L440

L440 is a good quality sheet gasket material with a wide range of application potential. Manufactured with a formulation of high quality fillers, premium aramid fibers and a nitrile rubber binder, L440 is a cost effective, high performance gasket material.

### Applications and Characteristics:

- Excellent sealing ability, good resistance to creep
- Good chemical resistance
- Inert gases, general chemicals, oils and fuels
- Great Recovery

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.

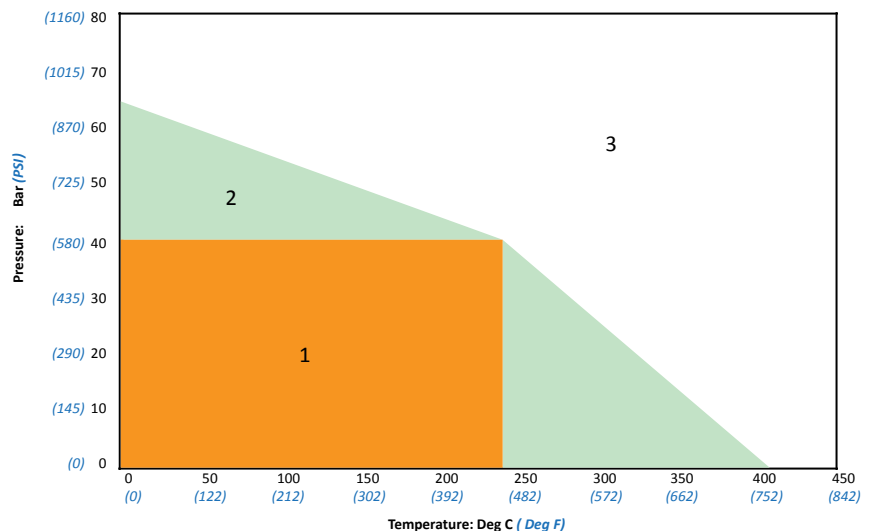


Creep Relaxation	ASTM F-38B (1/32")	20%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	30 MPa
	BS7531 (40 MPa @ 300°C)	24 MPa
Sealability	ASTM F-37A (1/32")	0.2 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1600 psi (11 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	25% max
Thickness Increase	ASTM F-146	
	ASTM Oil 1, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712121B3E22M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	17 kV/mm
Leachable Chlorides	FSA Method (Typical)	100 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	Green	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AY"	
Temperature Limits	-100°F to 752°F (-73°C to 400°C)	
Maximum Pressure	65 Bar (943 PSI)	

All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

L440 PRESSURE / TEMPERATURE GRAPH



# L441

A general service sheet gasket material with a wide range of application potential. Manufactured with a formulation of high quality fillers, premium aramid fibers and nitrile binder, L441 is the workhorse of the Lamons gasket line

Creep Relaxation	ASTM F-38B (1/32")	20%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	28 MPa
	BS7531 (40 MPa @ 300°C)	20 MPa
Sealability	ASTM F-37A (1/32")	0.25 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	25% max
Thickness Increase	ASTM F-146	
	ASTM Oil 1, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712121B3E22M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	15 kV/mm
Leachable Chlorides	FSA Method (Typical)	100 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	Blue	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Temperature Limits	-100°F to 707°F (-73°C to 375°C)	
Maximum Pressure	60 Bar (870 PSI)	

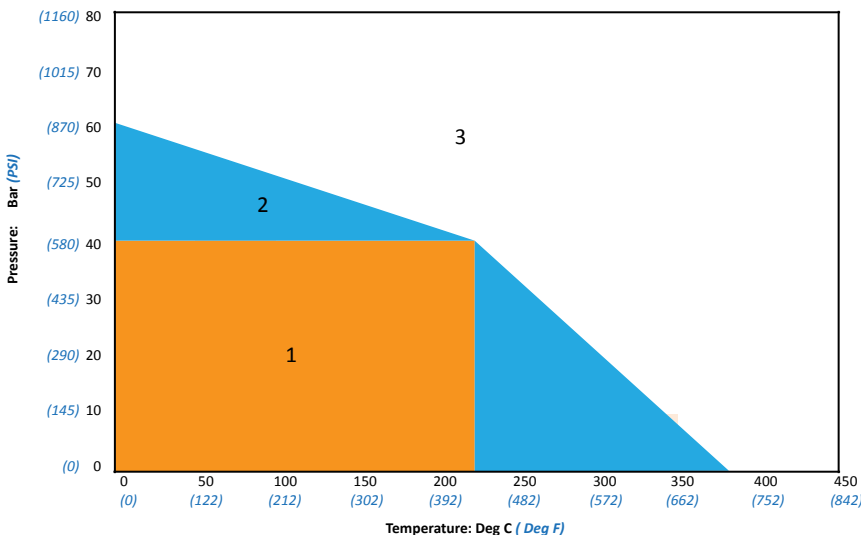
### Applications and Characteristics:

- Excellent sealing ability
- Good chemical resistance
- Creep relaxation minimization
- Great Recovery

**Note:** Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



L441 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

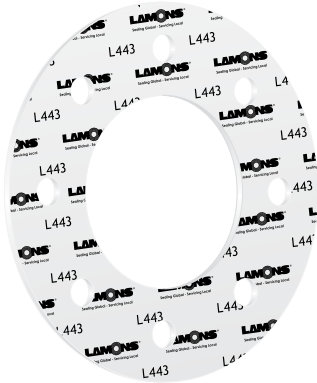
# L443

L443 is a premium sheet gasket material with a reinforcement structure consisting of glass and aramid fibers, it is bound together with a high quality nitrile rubber binder. L443 has excellent resistance to steam due to the addition of glass fiber.

### Applications and Characteristics:

- Excellent sealing ability, high resistance to creep
- Good steam resistance
- Stronger acids and alkalis, inert gases, general chemicals, oils and fuels
- Petroleum and petroleum derivatives

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.

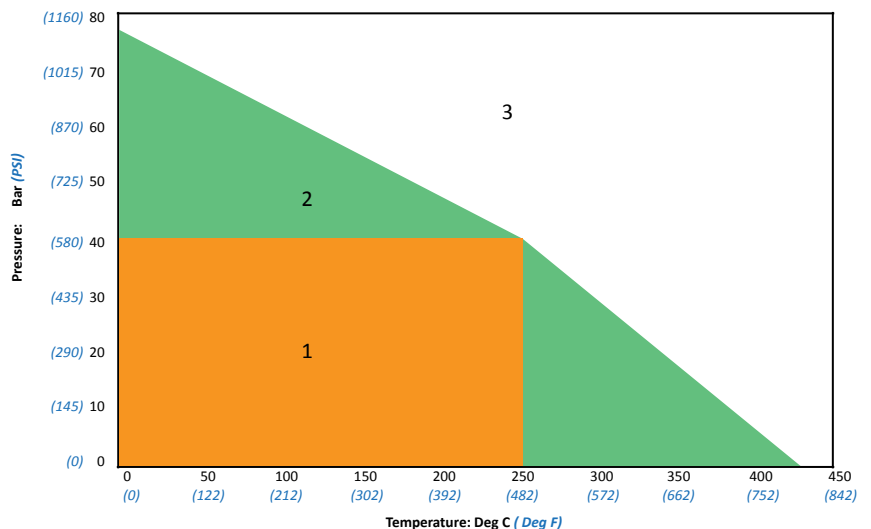


Creep Relaxation	ASTM F-38B (1/32")	20%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	32 MPa
	BS7531 (40 MPa @ 300°C)	27 MPa
Sealability	ASTM F-37A (1/32")	0.25 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	15% max
Thickness Increase	ASTM F-146	
	ASTM Oil 1, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712132B3E2IM5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	18 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		100 lbs/ft <sup>3</sup> (1.6 g/cc)
Color	White/Green	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AX" API 607 Fire Safe, ABS, GL	
Temperature Limits	-150°F to 800°F (-100°C to 425°C)	
Maximum Pressure	80 Bar (1160 PSI)	

All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

L443 PRESSURE / TEMPERATURE GRAPH



# L450

L450 is a premium sheet gasket material utilizing carbon and aramid fibers, it is bound together with a high quality nitrile rubber binder. L450 is designed to perform at high temperatures and pressures. Standardization and consolidation of many other gasket materials can be achieved by the use of L450.

Creep Relaxation	ASTM F-38B (1/32")	18%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	31 MPa
	BS7531 (40 MPa @ 300°C)	26 MPa
Sealability	ASTM F-37A (1/32")	0.3 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	15% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%	
Standard Line Callout	ASTM F-104	F712122B3E22M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	5 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		100 lbs/ft <sup>3</sup> (1.6 g/cc)
Color	Black	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AX" API 607 Fire Safe	
Temperature Limits	-150°F to 842°F (-100°C to 450°C)	
Maximum Pressure	80 Bar (1160 PSI)	

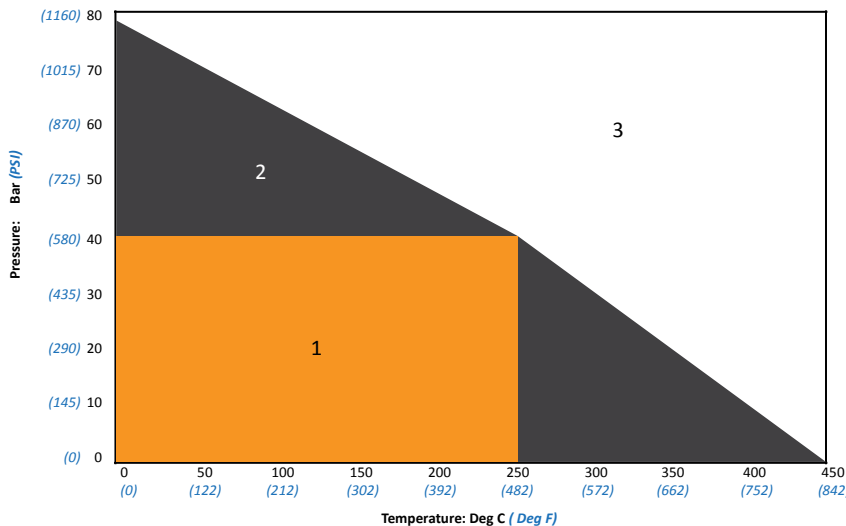
### Applications and Characteristics:

- Excellent sealing ability, high resistance to creep
- Good steam resistance
- Stronger acids and alkalis, inert gases, general chemicals, oils and fuels

**Note:** Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



L450 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

\* Can be used up to a maximum short term peak temperature of 900°F (482°C)

# L460

L460 is a premium sheet gasket material utilizing graphite and aramid fibers, it is bound together with a high quality nitrile rubber binder. L460 is designed to perform at high temperatures and pressures. Standardization and consolidation of many other gasket materials can be achieved by the use of L460.

### Applications and Characteristics:

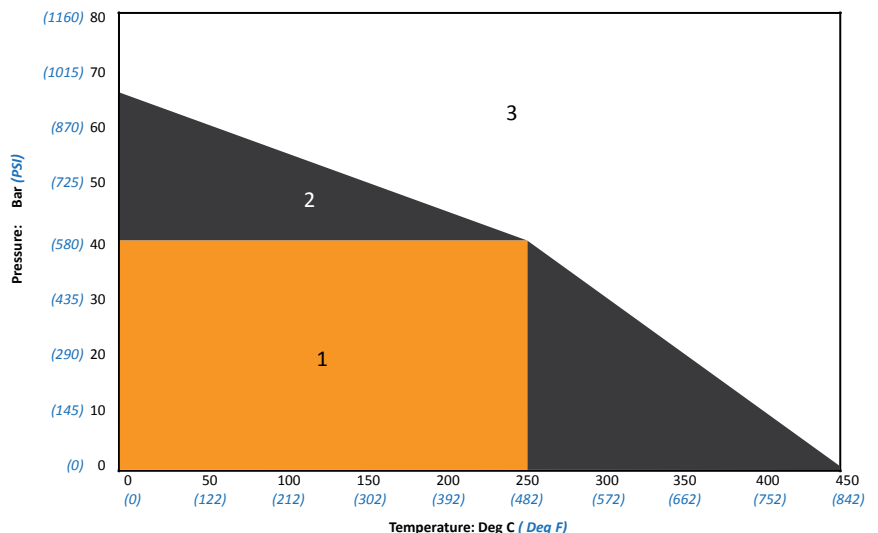
- Excellent sealing ability, high resistance to creep
- Good steam resistance
- Stronger acids and alkalis, inert gases, general chemicals, oils and fuels
- Petroleum and petroleum derivatives

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



Creep Relaxation	ASTM F-38B (1/32")	19%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	30 MPa
	BS7531 (40 MPa @ 300°C)	25 MPa
Sealability	ASTM F-37A (1/32")	0.3 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	11%
Recovery	ASTM F-36 J	55% min
Tensile Strength	ASTM F-152	1500 psi (10 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	15% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	0 - 5%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 5%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	0 - 7%
Standard Line Callout	ASTM F-104	F712122B3E22M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	5 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		100 lbs/ft <sup>3</sup> (1.6 g/cc)
Color	Black	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AX"	
Temperature Limits	-150°F to 842°F (-100°C to 450°C)	
Maximum Pressure	65 Bar (943 PSI)	

L460 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

# L540

L540 is a compressed sheet gasket material utilizing a high quality Neoprene binder. It is reinforced with aramid and inorganic fibers. This material has an inherent resistance to oil and petroleum based solvents

Creep Relaxation	ASTM F-38B (1/32")	25%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	28 MPa
	BS7531 (40 MPa @ 300°C)	20 MPa
Sealability	ASTM F-37A (1/32")	0.2 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1600 psi (11 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	20% max
Thickness Increase	ASTM F-146	
	ASTM Oil I, 5 hrs / 300°F (149°C)	0 - 10%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	15 - 25%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 10%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	10 - 20%
Standard Line Callout	ASTM F-104	F712332B4E45M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	12 kV/mm
Leachable Chlorides	FSA Method (Typical)	500 ppm
Density		106 lbs/ft <sup>3</sup> (1.7 g/cc)
Color	Dark Gray	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Temperature Limits	-60°F to 572°F (-51°C to 300°C)	
Maximum Pressure	60 Bar (870 PSI)	

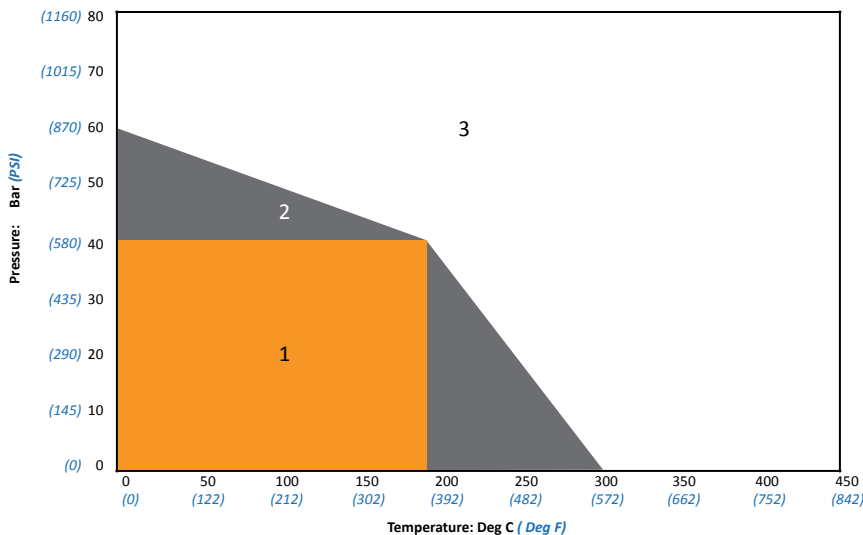
### Applications and Characteristics:

- It is chemically stable and possesses good mechanical properties
- It is an excellent choice for water and saturated steam
- Refrigerants
- Oils and fuels

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



L540 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

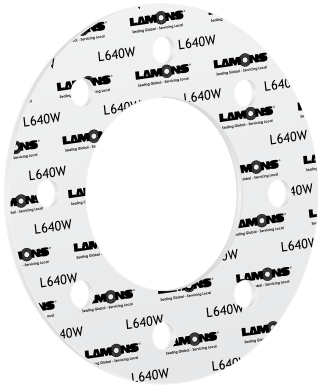
# L640W

L640W is a premium compressed sheet gasket material utilizing a high quality SBR binder. It is reinforced with an engineered blend of aramid and inorganic fibers.

### Applications and Characteristics:

- It is chemically stable and possesses good mechanical properties
- It is an excellent choice for water and saturated steam
- Mild acids and alkalis
- Inert gases.

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.

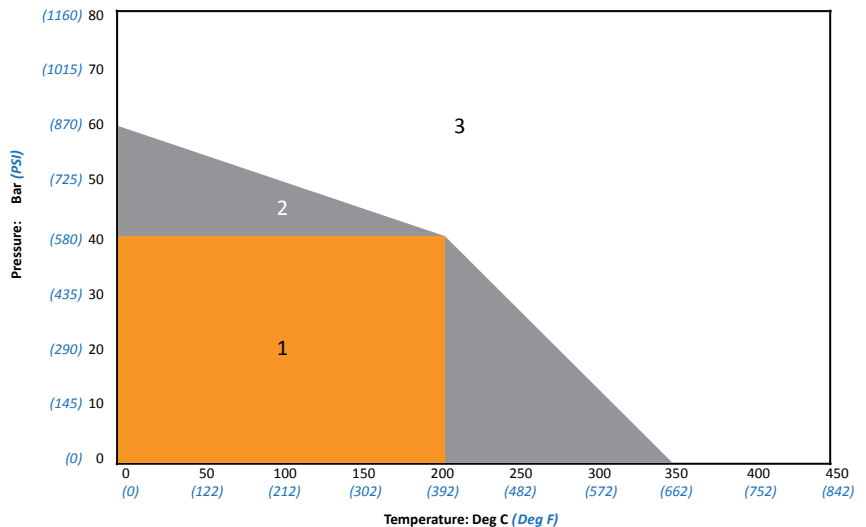


Creep Relaxation	ASTM F-38B (1/32")	20%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	29 MPa
	BS7531 (40 MPa @ 300°C)	23 MPa
Sealability	ASTM F-37A (1/32")	0.2 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 17%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1600 psi (11 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	25% max
Thickness Increase	ASTM F-146	
	ASTM Oil 1, 5 hrs / 300°F (149°C)	0 - 15%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	20 - 35%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	0 - 15%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	15 - 25%
Standard Line Callout	ASTM F-104	F712541B3E45M5
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM D149-95a	16 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	Off White	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Approvals	Meets "BS7531 Grade AY"	
Temperature Limits	-65°F to 662°F (-54°C to 350°C)	
Maximum Pressure	60 Bar (870 PSI)	

All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

L640W PRESSURE / TEMPERATURE GRAPH



# L740

L740 is a premium compressed sheet gasket material utilizing a high quality EPDM binder. It is reinforced with an engineered blend of aramid and inorganic fibers.

Creep Relaxation	ASTM F-38B (1/32")	24%
Residual Stress	DIN 52913 (50 MPa @ 175°C)	30 MPa
	BS7531 (40 MPa @ 300°C)	22 MPa
Sealability	ASTM F-37A (1/32")	0.2 ml/hr
Gas Leakage	DIN 3535/6	< 1.0 ml/min
Compressibility	ASTM F-36 J	7 - 15%
Recovery	ASTM F-36 J	50% min
Tensile Strength	ASTM F-152	1600 psi (11 MPa)
Weight Increase	ASTM F-146 after immersion in Fuel B for 5 Hrs @ 73°F (23°C)	23% max
Thickness Increase	ASTM F-146	
	ASTM Oil 1, 5 hrs / 300°F (149°C)	15 - 35%
	ASTM Oil 3, 5 hrs / 300°F (149°C)	30 - 50%
	ASTM Fuel A, 5 Hrs / 73°F (23°C)	10 - 35%
	ASTM Fuel B, 5 Hrs / 73°F (23°C)	15 - 35%
Standard Line Callout	ASTM F-104	F712690A-9B4E99L104M9
m & y values	1/16" thickness	1/8" thickness
m	2.5	3.2
y	3800	4100
Dielectric Strength	ASTM DI49-95a	16 kV/mm
Leachable Chlorides	FSA Method (Typical)	200 ppm
Density		112 lbs/ft <sup>3</sup> (1.8 g/cc)
Color	OffWhite/Gray	
Thickness Range	1/64" (0.4 mm) to 1/8" (3.2 mm)	
Sheet Size Availability	Max: 120" x 60" (3 m x 1.5 m)	
Temperature Limits	-100°F to 707°F (-73°C to 375°C)	
Maximum Pressure	65 Bar (943 PSI)	

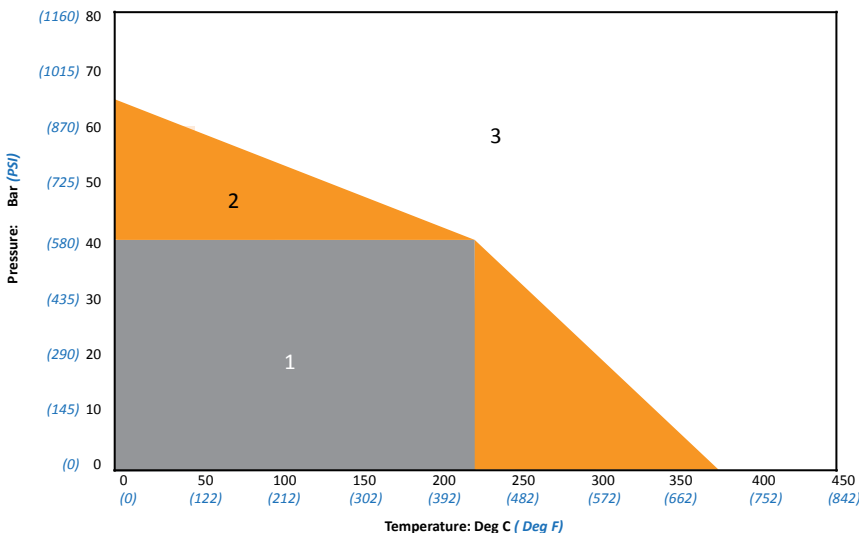
### Applications and Characteristics:

- It is chemically stable and possesses good mechanical properties
- It is an excellent choice for water and saturated steam
- Mild acids and alkalis
- Inert gases

Note: Please refer to Lamons Chemical Compatibility Chart (in the Appendix of this manual) for more information. All Lamons sheet gasket materials are supplied with anti-stick coating as standard. Can be manufactured with wire insert.



L740 PRESSURE / TEMPERATURE GRAPH



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

# Flexible Graphite

This is an all graphite material containing no resins or inorganic fillers. It is available with or without a metal insertion, and in adhesive-back tape form. Flexible Graphite has outstanding resistance to corrosion against a wide variety of acids, alkalies and salt solutions, organic compounds, and heat transfer fluids, even at high temperatures. There are two proven metal reinforced flexible graphite laminate materials ideal for 95% of all sheet gasket applications. Lamons flexible graphite laminates (LG-SS and LG-TC) are surface branded for easy identification. These gasket materials meet refinery, petrochemical and industrial service requirements.

## Graphite Tape

Rolls of graphite tape can be furnished with a strong self-adhesive backing strip, to facilitate repair of multiple surfaces, enhancement of existing design or installation as a form-in-place gasket.



### Temperature Limits

	Minimum	Maximum
In air	-320°F (-200°C)	840°F (450°C)
In Steam	-320°F (-200°C)	1200°F (650°C)
In Inert or Reducing Media	-320°F (-200°C)	5400°F (3000°C)

### Standard Dimensions

Thickness	0.005" (0.127 mm), 0.01" (0.254 mm), 0.015" (0.381), 0.02" (0.508 mm), 0.03"(0.762 mm) and 0.04" (1.016 mm)
Width	1/2" (12.7 mm) to 2" (50.8 mm)
Length	20' (6.1 m), 50' (15.24 m), 100' (30.48 m)

Note: Custom widths and lengths available

# Lamons LG-SS

LG-SS is a flat metal 316/316L stainless steel reinforced flexible graphite sheet material made with minimum 98% typical carbon content.

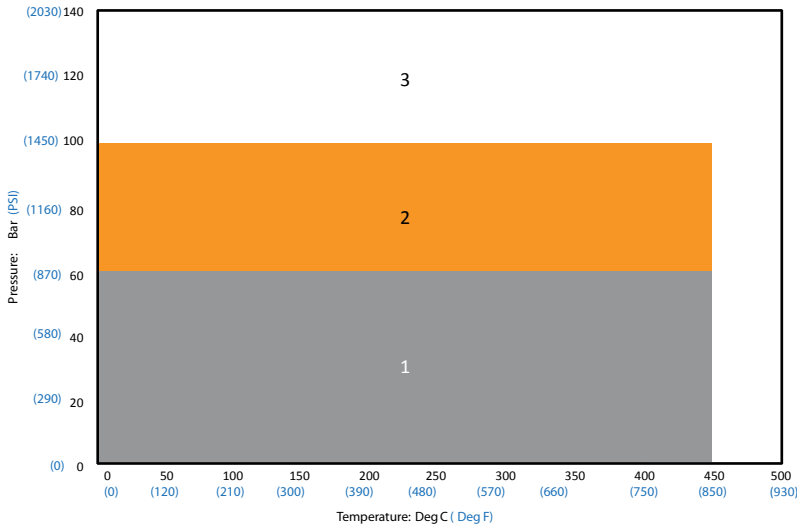
Creep Relaxation	<4%
Stability under stress (DIN 52913)	48 N/m <sup>2</sup>
Compressibility	30%-40%
Recovery	15%-20%
ASME code factor "M value"	2
ASME code factor "Y value"	900 psi
Number of inserts	1
Total chlorine (Max)	50 ppm
Density	70 lb/ft <sup>3</sup> (1.12 g/cc)
Ash content (Max)	2.0%
Tp max at 15,000 psi gasket stress	3227 psi (22 MPa)
PVRC design constants*:	G <sub>b</sub> = 816 psi a = 0.377 psi G <sub>s</sub> = 0.066 psi
Gas permeability according DIN 3535 (0.60")	<1.0 ml/min
Nominal Thickness	0.030"-0.120" (0.8 mm - 3 mm)
Typical Thicknesses	1/16" (1.5 mm) 1/8" (3 mm)
316/316L Insert Thickness	0.002" (0.05 mm)
Temperature Limits	Cryogenic to 850°F (454°C)



GASKET SELECTION

\*The values are taken from BFG-6.1 and ROTT. Test results are subject to interpretation and can lead to differing design constants.

**LG-SS PRESSURE / TEMPERATURE GRAPH**



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

## Lamons LG-TC

LG-TC is a reinforced flexible graphite sheet material laminated with tanged 316/316L stainless steel insert and made with minimum 98% typical carbon content.



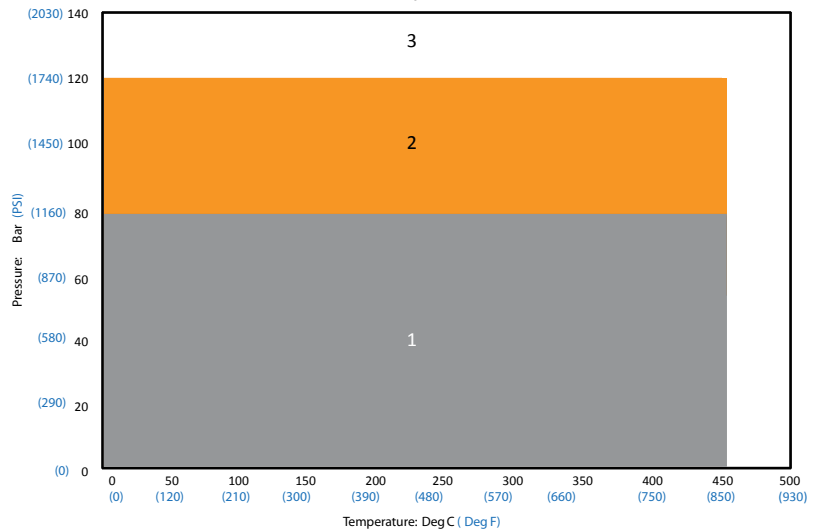
Creep Relaxation	<4%
Stability under stress (DIN 52913)	48 N/m <sup>2</sup>
Compressibility	30%-40%
Recovery	15%-20%
ASME code factor "M value"	2
ASME code factor "Y value"	2500 psi
Number of inserts	1
Total chlorine (Max)	50 ppm
Density	70 lb/ft <sup>3</sup> (1.12 g/cc)
Ash content (Max)	1.0%
Tp max at 15,000 psi gasket stress	2287 psi (16 MPa)
PVRC design constants*:	G <sub>b</sub> = 1400 psi a = 0.324 psi G <sub>s</sub> = 0.010 psi
Gas permeability according DIN 3535 (0.60")	<1.0 ml/min
Nominal Thickness	0.030" - 0.120" (0.8 mm - 3 mm)
Typical Thicknesses	1/16" (1.5 mm) 1/8" (3 mm)
316/316L Insert Thickness	0.004"/0.005" (0.1/0.127 mm)
Temperature Limits	Cryogenic to 850°F (454°C)

\*The values are taken from BFG-6.1 and ROTT. Test results are subject to interpretation and can lead to differing design constants.

All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Please contact Lamons Engineering department for clarification. [engineering@lamons.com](mailto:engineering@lamons.com)
3. Not Suitable.

LG-TC PRESSURE / TEMPERATURE GRAPH



## Lamons LG - L

LG-L homogeneous graphite sheets are manufactured from high carbon content of minimum 98% natural graphite.

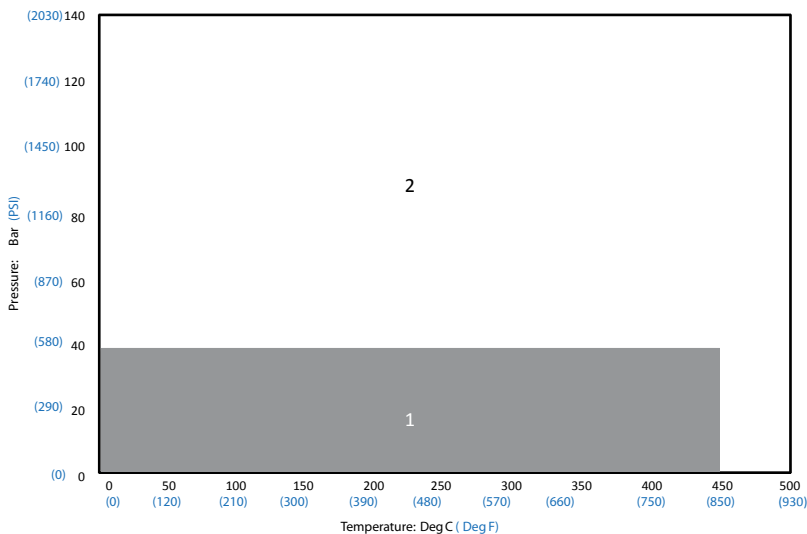
Creep Relaxation	<4%
Stability under stress (DIN 52913)	48 N/m <sup>2</sup>
Compressibility	30%-40%
Recovery	15%-20%
ASME code factor "M value"	2
ASME code factor "Y value"	2500 psi
Number of inserts	1
Total chlorine (Max)	50 ppm
Density	62.4 lbs/ft <sup>3</sup> (0.99 g/cc) - 70 lbs/ft <sup>3</sup> (1.12 g/cc) (ASTM F-1315)
Ash content (Max)	1.0%
Tp max at 15,000 psi gasket stress	2287 psi (16 MPa)
PVRC design constants*:	G <sub>b</sub> = 1400 psi a = 0.324 psi G <sub>s</sub> = 0.010 psi
Gas permeability according DIN 3535 (0.60")	<1.0 ml/min
Nominal Thickness	0.030" - 0.120" (0.8 mm - 3 mm)
Typical Thicknesses	1/16" (1.5 mm) 1/8" (3 mm)
316/316L Insert Thickness	0.004"/0.005" (0.1/0.127 mm)
Temperature Limits	Cryogenic to 850°F (454°C)

\*The values are taken from BFG-6.1 and ROTT. Test results are subject to interpretation and can lead to differing design constants.



GASKET  
SELECTION

**LG-L PRESSURE / TEMPERATURE GRAPH**



All Pressure / Temperature values are based on 1/16" (1.5 mm) gasket thickness.

1. Suitable (Chemical Compatibility has to be considered).
2. Not Suitable.