



December 10, 1984

Monsanto Company
P.O. Box 711
Alvin, Texas 77511

ATTN: Mr. Larry Reed

SUBJECT: Non-Asbestos Gasket Pricing

Dear Larry:

Attached are net prices on non-asbestos gaskets. Compressed sheet and ring gasket material is quoted as J-M 960 or 961 and Garlock 3200 or 3400; filler material for spiral wound gaskets will be Lamons Mica or Micarb.

We have also listed an alternate on sheet material and rings of Lamons style 1521 which we will be pleased to discuss further should Monsanto desire to make an evaluation.

We look forward to continuing to furnish the gasket requirements of Monsanto Company.

Yours very truly,

Chuck Elbert
Sales Representative
Bay Supply Company

CE/kaw

C 000441

Bay Supply Company

312-31st Street South, P.O. Box 330, Texas City, Texas 77592-0330, Telephone 409-948-3026

LAM022350



Bay Supply Company

-2-

Sheet Material

1/16'' x 60'' x 126'' Std. Size

\$98.56 ea.

Alt. #1521 1/16'' x 60'' x 126''

\$95.20 ea.

Non-Asbestos, Nitrile Binder,

2063 P.S.I. Tensile Strength

Across Grain

Terms of Payment:

1-10-30

F.O.B.:

Plantsite

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Bay Supply Company

-3-

1/16" Cut Rings (Price per 100 pcs)

	<u>150#</u>	<u>Alternate #1521,150#</u>	<u>300#</u>	<u>Alternate #1521,300#</u>
1/2	11.93	11.93	11.93	11.93
3/4	13.45	13.44	13.81	13.80
1	14.97	14.96	15.48	15.47
1 1/4	21.06	21.05	21.06	21.05
1 1/2	21.06	21.05	25.62	25.62
2	28.89	28.88	32.03	23.02
2 1/2	41.11	41.09	44.26	44.25
3	48.48	48.47	58.52	58.50
3 1/2	62.36	62.38	70.52	70.51
4	64.11	64.10	71.77	71.75
5	80.91	80.90	102.34	102.32
6	82.40	82.39	122.74	122.71
8	119.24	119.21	171.06	171.02
10	164.25	164.20	223.98	223.92
12	231.70	231.37	293.21	293.14
14	274.87	274.80	397.68	397.58
16	344.93	344.84	461.76	461.65
18	355.85	355.76	535.32	535.19
20	414.98	414.88	612.59	612.44
24	558.89	558.75	793.70	793.51

Terms of Payment: 1-10-30
F.O.B.: Plantsite

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Spiral Wound Gaskets
(W/Mica or Micarb)

	<u>304#</u>		<u>316</u>
	<u>150#</u>	<u>300#</u>	<u>150#</u>
			<u>300#</u>
1/2	.80	.81	.87
3/4	.81	.83	.93
1	.83	.94	.94
1 1/4	.91	.84	1.01
1 1/2	.93	.96	1.04
2	.98	1.02	1.12
2 1/2	1.10	1.19	1.24
3	1.23	1.27	1.35
3 1/2	1.67	1.92	1.97
4	1.48	1.60	1.70
5	1.92	2.25	2.24
6	1.98	2.30	2.32
8	2.59	3.17	2.96
10	3.35	3.90	3.86
12	5.05	5.37	5.77
14	6.70	7.68	7.67
16	8.03	8.92	9.17
18	10.10	10.87	11.65
20	12.03	12.51	13.89
24	13.55	16.28	15.59

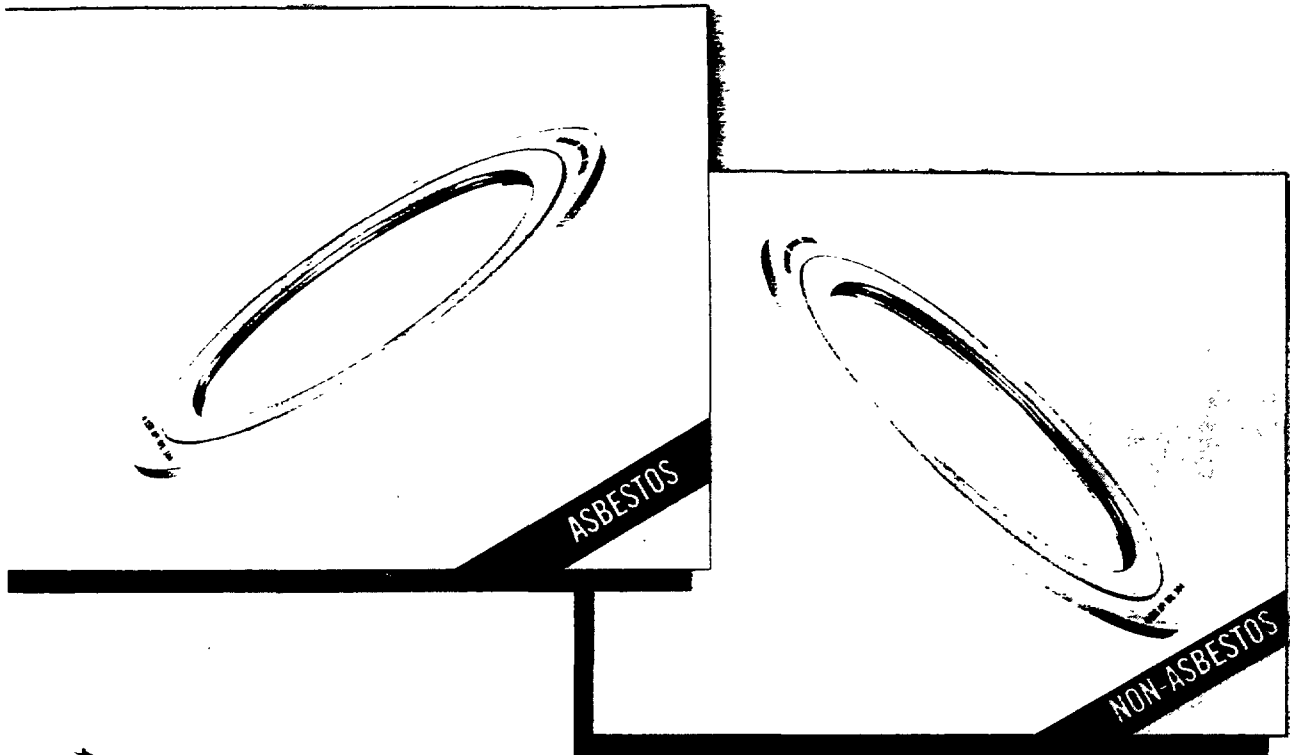
Terms of Payment: 1-10-30
F.O.B.: Plantsite

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Spiral Wound Asbestos Free Alternatives

Lamons Has The Answer



Announcing!

Mica based filler materials which

- Perform like asbestos
- Are priced similar to asbestos
- But are totally asbestos free

**AVAILABLE
NOW!**

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Lamons' Mica filled spiral wound gaskets offer an asbestos-free solution to your needs. When tested, spiral wound gaskets made with Mica demonstrated:

- Compressibility similar to asbestos filled spiral wound gaskets
- Recovery similar to asbestos filled spiral wound gaskets
- Superior sealing characteristics in rigorous thermal-cycle tests compared to asbestos filled spiral wound gaskets

• Superior temperature and chemical characteristics

Lamons' Mica filler is also available in a graphite impregnated form. This graphite and mica combination, known as Micarb®, offers many of the advantages of a pure graphite filler at a substantially reduced price. Chemical and thermal properties of Micarb® are similar to Mica.

Typical Data

	Asbestos	Mica
90% (min) Inorganic filler		
Binder (2-5%)	Natural Latex	Acrylonitrile
Density (lbs/ft³)	60.5	69.2
Tensile M.D. (PSI)	440	800
Tensile C.M.D. (PSI)	200	375
Compressibility @ 1000 PSI (%)	30.47	33.38
Recovery (%)	27.09	32.31
Total Chlorides (PPM)	250	100

Immersion Tests To ASTM F104

5 hrs. #1 Oil @ 300 degrees F.	Weight	42.8	43.1
	Caliper	2.9	0
5 hrs. #3 Oil @ 300 degrees F.	Weight	45.2	44.4
	Caliper	2.8	1.4
5 hrs. Fuel A @ 75 degrees F.	Weight	32.2	32.3
	Caliper	0	0
5 hrs. Fuel B @ 75 degrees F.	Weight	34.5	36.4
	Caliper	0	0

Thermal Gravimetric Analysis Weight Loss (%)

200 degrees C.	1.0	1.6
400 degrees C.	9.0	9.5
600 degrees C.	13.5	14.2
800 degrees C.	22.5	15.0
900 degrees C.	23.0	15.7

Lamons has the answers for all your gasket needs, whether you require non-asbestos SpiraSeal gaskets, metal jacketed asbestos

free or other special materials to meet individual applications...call or write to The Gasket Company...Lamons Metal Gasket

LAMONS METAL GASKET COMPANY

3600 Canal Street (713) 222-0284
P.O. Box 947 Telex 762064
Houston, Tx 77001 Toll Free 1-800-231-6906
Texas 1-800-392-2288

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Garlock® BLUE-GARD® Compressed Non-Asbestos Gasketing



 **Seals
with
authority**

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Garlock BLUE-GARD compressed gasketing family eliminates asbestos and seals better.

BLUE-GARD STYLE 3000

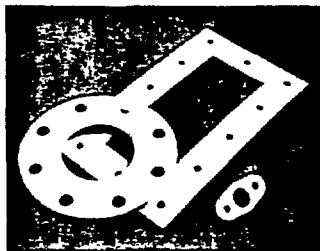


STYLE 3000 blue is a unique blend of synthetic fibers with a nitrile binder. A non-asbestos gasket that seals more effectively than asbestos in many applications. STYLE 3000 gasketing can be installed safely in most static sealing applications as a universal replacement gasket.

It meets a wide variety of service conditions in the hostile environments of metalworking, hydrocarbon processing, pulp and paper, power generation, mining, transportation, food processing and other industries where effective sealing is absolutely essential.

STYLE 3000 can be used for general service against mild acids and alkalis, gases, oils, solvents and many refrigerants.

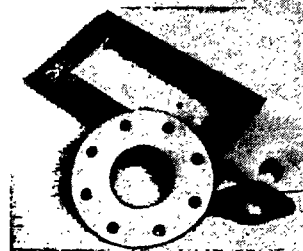
BLUE-GARD STYLE 3100



STYLE 3100 off-white is the result of a specially formulated combination of synthetic fibers and an SBR binder. It is readily applicable where nitrile or neoprene binders are not acceptable.

STYLE 3100 SBR has excellent recovery properties which are especially important where flanges expand and contract because of temperature changes of fluids. And under a load, it conforms readily to flange faces, thereby assuring an effective seal.

BLUE-GARD STYLE 3200 STYLE 3400



These styles are designed especially for more severe service requirements. A blend of synthetic fibers and SBR binder impart the strength required for sealability under tougher operating conditions. These two styles are particularly recommended for applications in the chemical, petrochemical, pulp and paper, and power generation industries.

Both styles have identical characteristics and offer the same benefits in terms of sealability, creep relaxation, recovery and compressibility. They only differ in color; STYLE 3200 is off-white and STYLE 3400, black.

Typical of GARLOCK BLUE-GARD compressed gasketing, these two styles offer greater sealability than their asbestos equivalents.

The technology to maintain seal integrity since 1887.

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GARLOCK BLUE-GARD compressed non-asbestos gasketing is designed to outperform and seal better than virtually any asbestos gasketing material you can use. Six styles are available now; one more will soon be released.

This gasketing runs the gamut of temperature, pressure and pH ranges and delivers superior performance in the process you are running -- chemical, petrochemical,

food and beverage, refining, hydrocarbon, pulp and paper, primary metals, power generation and more.

It eliminates asbestos and helps put profitability back into your productivity by sealing those insidious leaks you can't see but your accountants can detect.

GARLOCK BLUE-GARD compressed gasketing materials are unique blends of synthetic fibers and

binders formulated to meet the stringent requirements of a variety of applications in severe environments. The combinations result in superior sealability, excellent creep relaxation and compressibility plus improved recovery.

GARLOCK BLUE-GARD compressed gasketing can be used safely in most static sealing applications. It has wide areas of use in manufacturing and processing

BLUE-GARD STYLE 3300

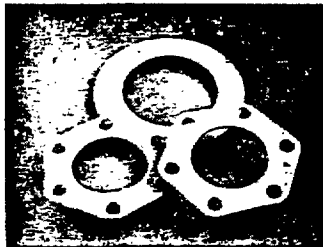


STYLE 3300 black was developed with a blend of synthetic fibers and a neoprene binder for applications where resistance to oil is as important as sealability. This distinctive binder makes STYLE 3300 particularly useful for severe service in refineries and petrochemical installations. And, since it has the ability to withstand various FREON* fluids, STYLE 3300 is also ideal for use in refrigeration equipment.

It has the same superlative physical characteristics found throughout the entire family of BLUE-GARD compressed gasketing.

*Trademark E I duPont

BLUE-GARD STYLE 3700



The newest member of the GARLOCK BLUE-GARD gasketing family, STYLE 3700 grey is a caustic-resistant, compressed non-asbestos material. Its unique blend of synthetic fibers and an EPDM binder makes it especially effective for sealing applications in the general chemical, petrochemical and pulp and paper industries. Good ozone resistance adds considerably to its shelf life.

Seals with authority

The family of GARLOCK BLUE-GARD compressed gasketing materials is the result of our continuing program of design and product development. Our objective is to provide gasketing to meet or exceed the severe service conditions found in the processing industries; to give you the assurance of a complete and positive seal in every GARLOCK BLUE-GARD gasketing application.

Lower costs in the long run
GARLOCK BLUE-GARD compressed gasketing saves you money in more ways than one. The superior sealability means costly product losses are minimized. The excellent physical properties provide extra durability so BLUE-GARD gasketing lasts longer under severe conditions. There is less maintenance required, fewer replacements.

You can be money ahead with BLUE-GARD gasketing. See your authorized GARLOCK Industrial Distributor or write GARLOCK Mechanical Packing Division, 1666 Division Street, Palmyra, New York 14522, 315/597-4811; Garlock of Canada Ltd., Toronto, Ontario M8Z 2H3, 416/255-9114.

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These ASTM values clearly show why the BLUE-GARD family of compressed non-asbestos gasketing seals better.

TYPICAL PHYSICAL PROPERTIES

ASTM TEST METHOD	PHYSICAL PROPERTIES	STYLES				
		3000	3100	3200 3400	3300	3700
F 37	Sealability Milliliters/Hour Leakage, ASTM Fuel A (isooctane): Gasket load, 500 psi Internal pressure, 9.8 psi Nitrogen: Gasket load, 3000 psi Internal pressure, 30 psi	0.2 0.9	0.2 0.6	0.1 0.4	0.2 1.0	0.1 0.7
F 36	Recovery Minimum Percent:	50	40	50	50	40
F 36	Compressibility Percent Range:	7-17	7-17	7-17	7-17	7-17
F 38	Creep Relaxation Percent Relaxation:	21.7	23.9	18.4	18.2	24.5
F 146	Fluid Resistance After Five Hour Immersions ASTM #1 Oil @ +300°F. Thickness Increase Range Weight Increase, Maximum ASTM #3 Oil @ +300°F. Thickness Increase Range Tensile Loss, Maximum ASTM Fuel A @ 70-85°F. Thickness Increase Range Weight Increase, Maximum ASTM Fuel B @ 70-85°F. Thickness Increase Range Weight Increase, Maximum.	0-5% 8% 0-8% 45% 0-5% 8% 0-8% 15%	0-10% 20% 15-40% 70% 0-15% 25% 10-30% 30%	0-10% 20% 20-40% 70% 0-15% 25% 10-30% 30%	0-5% 15% 15-30% 50% 0-10% 20% 10-25% 25%	NOT AVAILABLE
F 152	Tensile Strength Across Grain psi	2000	2000	2800	2800	2500
	Density grams/cm ³ . (lbs./ft ³).	1.60 (100)	1.60 (100)	1.60 (100)	1.60 (100)	1.60 (100)

NOTE Test results in accordance with ASTM F 104, properties based on 0.8 mm (1/32") sheet thickness.

OTHER DATA

High Temperature Limit: +371°C (+700°F)**
Fluid Resistance: pH**

1-11 1-11 1-11 1-11 4-14

**This is a general guide and should not be the sole means of selecting or rejecting this material.

GARLOCK BLUE-GARD compressed non-asbestos gasketing is available in sheet sizes of 60" x 60", 60" x 120", and 60" x 180" and in six thicknesses 1/64", 1/32", 3/64", 1/16", 3/32" and 1/8".

Properties applications shown throughout this data sheet are typical. Your specific application should not be undertaken without independent study and evaluation for suitability.

While the utmost care has been used in compiling this flyer, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.

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Colt Industries



Garlock

**Mechanical Packing Division
Industrial Packing**

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