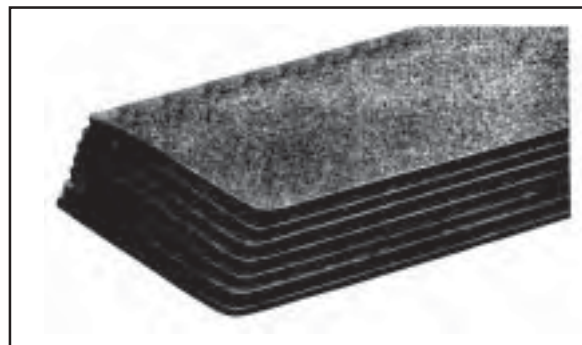


NEOPRENE
BUNA-N
NATURAL RUBBER
BUTYL
HYPALON®
VITON®
EPT / EPDM
SILICONE
TEFLON®
BUNA-S
CONDUCTIVE
DIAPHRAGM SHEET
CORK CORK & RUBBER
PLANT FIBRE
COMPRESSED NON-ASBESTOS
C. I. SHEET
RED SHEET
SPONGE
OPEN CELL
CLOSED CELL

SHEET RUBBER CELLULAR PRODUCTS GASKET PACKING

THE SUGGESTED USES AND RECOMMENDATIONS SHOWN IN THIS CATALOGUE ARE OFFERED AS A GENERAL INDICATION OF THE COMPATABILITY OF THE VARIOUS ARTICLES COMING IN CONTACT WITH OUR PACKING, BASED ON ACTUAL SERVICE EXPERIENCE, THE ADVICE OF THE POLYMER SUPPLIERS, AND THE CONSIDERED OPINION OF RUBBER CHEMISTS. IT MUST BE STRESSED, HOWEVER, THAT THEY ARE OFFERED ONLY AS A GUIDE, AND THAT THE ACCURACY OF THE RATINGS CANNOT BE GUARANTEED.



GASKETS

GASKETS

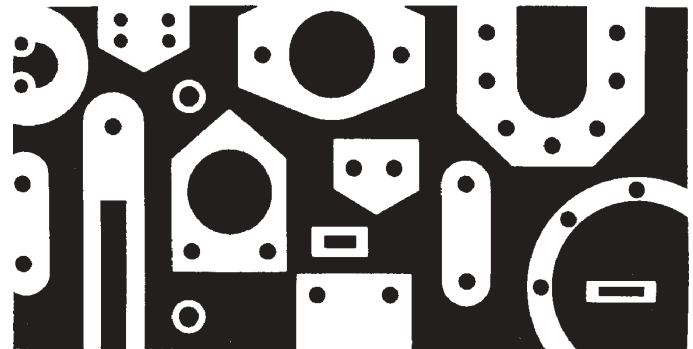
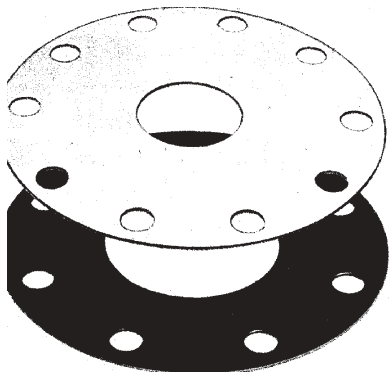
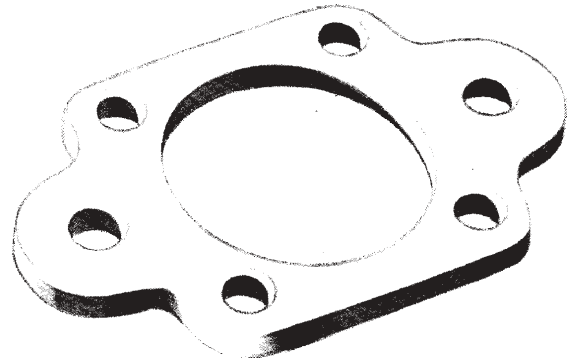
GASKETS

CUSTOM DIE CUT
SPECIAL HAND CUT
PRODUCTION RUNS
ALL TYPES - SOLID OR SPONGE STOCK
ANY THICKNESS - ANY SHAPE - ANY QUANTITY
LONG LENGTH STRIPS - PADS - BLOCKS
DRILLED OR UNDRILLED - PRESSURE SENSITIVE
ONE SIDE OR BOTH SIDES - FAST DELIVERY



DIE CUT GASKETS

STANDARD AND CUSTOM DESIGN



"a CAPITAL name in rubber"



SHEET RUBBER for ALL APPLICATIONS

NEOPRENE

A chloroprene polymer possessing good ozone and weather resistance characteristics. Good resistance to petroleum products, alcohols, many acids and salts. ASTM Designation CR.

BUNA N SHEET (Nitrile)

Buna N is a copolymer of butadiene and acrylonitrile having good resistance to hydrocarbon solvents, alkalines, petroleum oils, vegetable oils, aviation gasolines and water. Intended for all types of gaskets, washers, seals, etc. Available in a wide range of durometers. ASTM Designation NBR.

TAN PURE GUM SHEET (Natural Rubber)

Pure gum is all natural and/or natural synthetic rubber compounded with a minimum of loading and accelerators. Extremely flexible and resilient, has high tensile and elongation characteristics inherent in a pure gum stock. ASTM Designation NR.

VITON

Excellent resistance to heat, fuels, oils, solvents, and a wide range of corrosive chemicals. ASTM designation FPM.

E.P.D.M. (Ethylene Propylene Diene-Monomer)

Excellent resistance to heat aging, oxidation, ozone, acids, and alkalis. Good electrical resistivity properties. Poor resistance to petroleum based fluids. ASTM designation EPDM.

DIAPHRAGM SHEET NEOPRENE, NYLON INSERTED

A very high quality sheet reinforced with one ply Nylon for high pressures and oil resistance. designed especially for use on regulators

HYPALON

A synthetic rubber, has excellent ozone and acid resistance as well as resistance to cracking caused by sunlight, weather, chemicals or elevated temperatures. ASTM designation CSM.

BUTYL

A synthetic rubber, has excellent resistance to weathering and ozone, very low permeability to liquids and gasses, excellent dynamic properties (energy absorption), electrical resistance and a high co-efficient of friction. ASTM Designation IIR.

RED SHEET

A relatively inexpensive synthetic sheet that is used primarily as a gasketing material where resistance to extreme heat, acids, alkalis, salts, chemicals, etc., is not a problem.

CLOTH INSERTED SHEET

For use against hot or cold water, low pressure steam, air or gas where gaskets containing fabric are required to resist the cold flow of the rubber.

THE GENERAL CHEMICAL RESISTANCE OF VARIOUS ELASTOMERS

This chart is offered only as a general guide, indicating the suitability of various elastomers for service in these chemicals and fluids. The ratings are based for the most part, on published literature of various polymer suppliers, rubber manufacturers, and in some cases, the considered opinion of experienced compounders. We cannot guarantee their accuracy nor assume responsibility for use thereof. Many factors must be considered in using a rubber part in service. The most important as we see them are:

1. **The Temperature of Service:** Higher temperatures increase the effect of all chemicals on polymers. The increase varies with the polymer and the chemical. A compound quite suitable at room temperature might fail miserably at elevated temperature.
2. **Conditions of Service:** A compound that swells badly might still function well as a static seal yet fail in any dynamic application.
3. **The Grade of the Polymer:** Many types of polymers are available in different grades that vary greatly in chemical resistance.
4. **The Compound Itself:** Compounds designed for other outstanding properties may be poorer in performance in a chemical than one designed especially for fluid resistance.
5. **The Durometer:** In general, the harder a compound the better its resistance.

In light of the above factors, it is always best to test.

FLUID CHART KEY	GENERAL PURPOSE NON-OIL RESISTANT					GENERAL PURPOSE - OIL RESISTANT					SPECIALTY ELASTOMERS				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Type of Rubber	Natural Rubber NR	Butadiene Styrene SBR	Butyl	Ethylene Propylene EPM	Nitrile	Epicthlorohydrin	Neoprene	Hypalon	Urethane	Polysulfide	Silicone	Fluoro Silicone	Fluoro Elastomer	Poly Acrylate	
MATERIAL AND ASTM DESIGNATION	Isoprene IR	Butadiene BR	IIR	EPDM	NBR	ECO	CR	CSM	AU EU	T	SI	FSI	FPM	ACM	
CHEMICAL GROUP	Poly Isoprene	Poly Butadiene Butadiene Copolymer	Isobutylene Isoprene Polymer	Ethylene Propylene Copolymer and Terpolymer	Butadiene Acrylonitrile Copolymer	Epicthlorohydrin Polymer and Copolymer	Chloroprene Polymer	Chloro-sulfonated Polyethylene	Urethane Polymer	Oxamic Polysulfide Polymer	Organic Silicone Polymer	Fluorinated Organic Silicone Polymer	Fluorocarbon Polymer	Copolymer of Acrylic Ester and Acrylic Halide	
GENERALLY RESISTANT TO	Most Moderate Chemicals Wet or Dry, Organic Acids, Alcohols, Ketones, Aldehydes	Similar to Natural Rubber	Animal and Vegetable Fats, Oils, Greases, Ozone, Strong Oxidizing and Ozone-resistant Chemicals	Animal and Vegetable Oils, Ozone, Strong Oxidizing Chemicals	Many Hydrocarbons, Fats, Oils, Greases, Hydraulic Fluids, Chemicals	Similar to Nitrile with Ozone Resistance	Moderate Chemicals and Acids, Ozone, Fats, Greases, and Many Oils and Solvents	Similar to Neoprene with Improved Resistance	Ozone, Hydrocarbons, Moderate Chemicals, Fats, Oils, Greases	Ozone, Oils, Solvents, Thinners, Ketones, Esters, Aromatic Hydrocarbons	Moderate or Oxidizing Chemicals, Ozone, Concentrated Sodium Hydroxide	Moderate or Oxidizing Chemicals, Ozone, Chlorinated Solvents, Bases	All Aliphatic, Aromatic and Halogenated Hydrocarbons, Acids, Animal and Vegetable Oils	Ozone, Extreme Pressure, Lubricants, Hot Oils, Petroleum Solvents, Animal and Vegetable Fats	
GENERALLY ATTACKED BY	Ozone, Strong Acids, Fats, Oils, Greases, Most Hydrocarbons	Similar to Natural Rubber	Petroleum Solvents, Cool Tar Solvents, Aromatic Hydrocarbons	Mineral Oils and Solvents, Aromatic Hydrocarbons	Ozone*, Ketones, Esters, Aldehydes, Chlorinated and Nitro Hydrocarbons	Ketones, Esters, Oxidizing Acids, Ketones, Chlorinated Aromatic and Nitro Hydrocarbons	Strong Oxidizing Acids, Esters, Ketones, Chlorinated Aromatic and Nitro Hydrocarbons	Concentrated Oxidizing Acids, Esters, Ketones, Chlorinated Aromatic and Nitro Hydrocarbons	Concentrated Oxidizing Acids, Ketones, Esters, Chlorinated and Nitro Hydrocarbons	Mercaptans, Chlorinated Hydrocarbons, Nitro Hydrocarbons, Ethers, Amines, Heterocyclics	Many Solvents, Oils, Concentrated Acids, Dilute Sodium Hydroxide	Brake Fluids, Hydrocarbons, Ketones	Ketones, Low Mole Weight Esters and Nitro Compounds Containing Aromatic Hydrocarbons, Halogenated Phenol	Water, Alcohols, Glycols, Alkali Esters, Aromatic Hydrocarbons, Halogenated Hydrocarbons, Phenol	

*except PVC filmic

NEOPRENE

OIL, FLAME, AND WEATHER RESISTANT SYNTHETIC RUBBER SHEET

NEOPRENE retains its good physical properties during long term exposure to most oils, greases, gasoline's, and many other industrial chemicals and solvents.

NEOPRENE is not suggested for service with most chlorinated solvents, strong oxidizing chemicals or fuels, and solvents with high aromatic content.

General purpose *NEOPRENE* is serviceable at 200°F. to 225°F. (continuous exposure). Conventional *NEOPRENE* can operate at temperatures down to -40°F.

NEOPRENE will not propagate flame. It burns in the presence of flame, but is self-extinguishing when flame is removed.

AFFECTED BY: Aromatic Hydrocarbons, Phosphate, Hydraulic Fluids, Strong Oxidizing Acids, Esters, Ketones and Lacquer Solvents.

CHLORPRENE POLYMER

STOCK SIZES:

1/64"	1/4"
1/32"	3/8"
1/16"	1/2"
3/32"	3/4"
1/8"	1"
3/16"	

ROLL WIDTHS

36" & 48"

We cut or fabricate to your specifications - Rubber Strips, Pads, Blocks (drilled and undrilled) Flat Gaskets, Spliced Gaskets, Die Cut Gaskets, from stock sheets.

WHITE NEOPRENE SHEET - SOFT LOW-DUROMETER SHEET - Also available

BUNA-N

FUEL & SOLVENT RESISTANT SYNTHETIC RUBBER SHEET

Excellent resistance to petroleum oils and gasoline.

BUNA-N is used where maximum oil resistance is required. It can also be used with aromatic solvents such as benzol, toluol, zylene and coke or coal tar by-products.

BUNA-N is excellent for hot and cold water service and for use where dilute acids, alkalies, ammonia, vegetable oils or animal fats are present in the application.

BUNA-N resistance to aromatic hydrocarbons is better than that of *NEOPRENE*, and its resistance to mineral oils is excellent. It has only fair resistance to sunlight or weather.

Where chemicals or oil are present it is a preferred material for gaskets, for fuel oil and oil seals, sealing strips.

Temperature resistance from -40°F to +275°F.

In general, *BUNA-N* is not affected by Alkaline Solutions, Salt Solutions, Aliphatic Hydrocarbons, both saturated and unsaturated.

Little affected by: Vegetable fats and oils, Aliphatic Alcohols, Glycols and Glycerols.

Not suggested for: Strong Oxidizing Agents, Nitrated Hydrocarbons, Ketones, Acetates, Polar Liquids, Phenols and Aldehydes.

STOCK THICKNESSES AVAILABLE

ROLL WIDTH
36"

NATURAL RUBBER

ACID, ABRASION RESISTANT — NATURAL RUBBER

TAN PURE GUM is a floating stock, non-staining rubber which resists most inorganic salts, ammonia, acids and alkalis.

NATURAL RUBBER high tensile sheet deforms easily and recovers readily on doors, closures and rough flanges, such as refrigeration applications, marine service and general industrial gasket and bumper use.

NATURAL RUBBER sheet is highly resistant to tear and cut growth, and has high impact resilience. Its resistance to low temperature brittleness is superior to some of the other elastomers, but compression set above 212°F is relatively high. Pure Gum Rubber Sheet is used wherever a soft rubber seal is required - excellent for either hot or cold water service - excellent for sand blast curtains.

It exhibits excellent abrasion resistance and has better resilience and low temperature flexibility than most synthetics.

Approximate temperature range -65° to +212°F

AFFECTED BY: Sunlight, Heat Aging, Oxygen, Ozone, Gasoline and Oil, Aromatic Hydrocarbons, Degreaser Solvents, Silicate, Hydraulic Fluids. Turpentine and Carbon Tetrachloride.

STOCK SIZES

.010
1/32"
1/16"
1/8"
1/4"
3/8"
1/2"

ROLL WIDTH

36"

COMMERCIAL TOLERANCES* SHEET RUBBER & DIAPHRAGM SHEET

NOMINAL THICKNESS (TO BUT NOT INCLUDING)			TOLERANCES (PLUS OR MINUS)	
FRACTIONS	DECIMAL INCHES	MILLIMETERS	INCHES	MILLIMETERS
UNDER 1/32	UNDER .031	UNDER .80	.010	.25
1/32 TO 1/16	.031 TO .062	0.80 TO 1.60	.012	.30
1/16 TO 1/8	.062 TO .125	1.60 TO 3.20	.016	.40
1/8 TO 3/16	.125 TO .187	3.20 TO 4.80	.020	.50
3/16 TO 3/8	.187 TO .375	4.80 TO 9.50	.031	.80
3/8 TO 9/16	.375 TO .562	9.50 TO 14.30	.047	1.20
9/16 TO 3/4	.562 TO .750	14.30 TO 19.20	.093	2.40
3/4 TO 1	.750 TO 1.0	19.20 TO 25.40	10%	10%
1 AND OVER	1.00 AND OVER	25.40 AND OVER		

* PER R M A STANDARDS

SLAB STOCK

Slabs up to 4" thick are available in 36" or 48" squares. Thicker slabs can be made with Special Tooling. Lighter gauges up to 56 inches square are also readily available. Slabs can be made from both Natural and Synthetic Rubbers. Slabs are an ideal product for making Rubber Bumpers, Blocks, Gaskets, Press Pads etc.



RED RUBBER SHEET (RAINBOW RUBBER)

NON-OIL RESISTANT RUBBER SHEET

STOCK SIZES

1/16"
1/8"
3/16"
1/4"

ROLL WIDTHS

36"
48"

A general purpose, highly compounded *Red Rubber Sheet Packing*, suitable for medium pressure hydraulic applications such as hot and cold water, and low pressure steam. Also air and vacuum.

RED SHEET is a competitively priced packing, popular with the plumbing trade for gasketing, shimming and washers.

Firm compounding produces a tight joint and resists flow under compression generally used for low pressure applications, where oil resistance is not required.

An economical, non-blooming packing - suitable for hot water (180° F) and cold water pressures to 125 pounds.

BLACK C.I.

NON-OIL RESISTANT RUBBER SHEET

STOCK SIZES

1/16"
1/8"

ROLL WIDTHS

36"
48"

BLACK CLOTH INSERTED SHEET is an economical packing particularly suited for general service, where oil is not present.

For hydraulic service, air lines and other hot and cold water joints.

The light weight, low strength cotton ply insertion used in the manufacture of C.I. SHEET is designed for low pressure applications - for usage where creeping in service indicates a reinforced sheet packing, and where stresses are generally static in nature.

Where dynamic stresses are involved, the use of DIAPHRAGM Sheet is suggested.

HANDHOLE AND MANHOLE GASKETS

MOLDED RUBBER BOILER GASKETS, FOR STEAM, WATER. OR AIR SERVICE. AVAILABLE IN ELLIPTICAL, ROUND, OBLONG, RECTANGLE, DIAMOND, PEAR AND CLOVERLEAF SHAPES

SUITABLE FOR PRESSURES TO 180 PSI,
AND TEMPERATURES TO 380°F



SILICONE

HIGH - LOW TEMPERATURE RESISTANT

STOCK SIZES

1/32"
1/16"
1/8"
3/16"
1/4"
3/8"
1/2"

SILICONE - one of the most useful elastomers available to the design engineer.

SILICONE rubber is serviceable up to 500°F. with special grades useful for limited service up to 700° F.

Low temperature flexibility - used successfully for prolonged periods at -70oF and some stocks are flexible at -150°F.

Immune to aging, ozone and weather hardening.

Good dielectric properties maintained at elevated temperatures.

Good chemical resistance - non-sticking, odorless, tasteless, non-corrosive.

Superior compression set resistance.

Because of its resistance to the deteriorating effect of sunlight, moisture, radiation and oxidation at elevated temperatures, *SILICONE* rubber's service life at room temperature is virtually unlimited.

When exposed to direct flame, *SILICONE* rubber burns to a non-conducting ash which continues to insulate and does not give off toxic fumes.

SILICONE rubber has good resistance to many oils and other chemicals - affected little by lubricating, animal and vegetable oils, alcohol's, chlorinated di-phenyls and most dilute acids and alkalis.

AFFECTED BY: Gasoline, Oil and Degreaser Solvents.

SILICONE SPONGE

STOCK SIZES

1/16"
1/8"
3/16"
1/4"
5/16"
3/8"

SILICONE SPONGE has unique resistance to extremes of temperature. Its physical properties are not adversely affected by continuous exposure to temperatures as high as +500° F .

Its low temperature flexibility is unexcelled by any other elastomeric sponge rubber - remains functional at temperatures as low as -100°F.

Non-corrosive - odorless, tasteless and non-toxic.

Excellent release surface - easy bonding - exceptional dampening properties.

Resistant to deteriorating effects of sunlight, moisture, oxidation, radiation at elevated temperatures.

Available with pressure sensitive adhesive, die cut into gaskets, or strips.

VITON®

UNSURPASSED FOR SERVICE IN OILS, FUELS, SOLVENTS

STOCK SIZES

1/32"
1/16"
1/8"
3/16"
1/4"

Performance of *VITON* in contact with commercial fuels, oils, solvents and chemicals is unequalled by any other type of synthetic rubber.

It has excellent resistance to lubricants, most mineral acids and to many aliphatic and aromatic hydrocarbons, tetrachloride, toluene, benzene and zylene.

VITON is not suggested for service in low molecular weight esters and ethers, ketones and certain amines, hot anhydrous hydrofluoric or chlorosulfonic acids.

VITON has outstanding resistance to sun, weather and ozone.

VITON will not propagate flame. It will burn in the presence of flame, but is self extinguishing when flame is removed. Temperature range from -40° F to +400° F

Poor dynamic properties at low temperatures.

© REGISTERED TRADEMARK OF E.I. DU PONT DE NEMOURS & CO.

EPDM

SYNTHETIC RUBBER SHEET

STOCK SIZES

1/16"
1/8"
3/16"
1/4"

EPDM is a synthetic elastomer useful as a general purpose sheet packing. Physical characteristics are generally similar to those of SBR.

EPDM has excellent aging qualities and heat resistance - also resistant to a wide variety of chemicals, sunshine, abrasion and water absorption.

It will resist oxidation, ozone, acids, alkalis.

EPDM can be used in virtually all types of services except those involving oil or other petroleum base products.

Temperature range -67°F. to +350° F.

AFFECTED BY: Aromatic and Aliphatic Solvents, oil and other petroleum base products.

SPIRAL WOUND METALLIC GASKETS

PROVIDES SECURE SEALING OF JOINTS,
UNDER TEMPERATURE AND PRESSURE
EXTREMES.



URETHANE

ABRASION RESISTANT RUBBER

STOCK SIZES

1/32"
1/16"
1/8"
1/4"

Urethane sheet has the resiliency of rubber with the strength of plastic.

High tear resistance and tensile strength.

Resistant to abrasion, water and chemicals.

Available in sheet form, may be die cut. Also molded parts are available

DIAPHRAGM SHEET

STOCK SIZES

1/32"
1/16"
1/8"
1/4"

NEOPRENE DIAPHRAGM SHEET is a high-grade general purpose, diaphragm material with broad applications in oil and gasoline service such as fuel pumps, control valves and similar uses.

DIAPHRAGM SHEET is a strong, flexible packing material designed to transmit pulsating motions between fluids, gases, and air in all types of gauges, meters, and valves.

It contains high quality fabric insertions to give uniform structural strength over the entire diaphragm area.

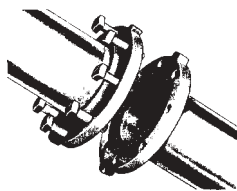
Made with plies of medium weight, square-woven cotton duck - or nylon.

Combined with the oil-resistant properties of Neoprene, it will operate effectively in an oil atmosphere peculiar to many valves, regulators and meters.

PIPE FLANGE GASKETS

AMERICAN STANDARD NONMETALLIC GASKETS

FOR CAST IRON FLANGES



125 - 150 LB. RING			125 - 150 LB. FULL FACE				
PIPE SIZE OLD STD. I.D.	NEW STD. ASA I.D. AND O.D.	PIPE SIZE OLD STD. I.D.	NEW STD. ASA I.D. AND O.D.	NO. HOLES	DIA. HOLE	BOLT CIRCLE	
1/2	27/32 x 1-7/8	1/2	27/32 x 3-1/2	4	5/8	2-3/8	
3/4	1-1/16 x 2-1/4	3/4	1-1/16 x 3-7/8	4	5/8	2-3/4	
1	1-5/16 x 2-5/8	1	1-5/16 x 4-1/4	4	5/8	3-1/8	
1-1/4	1-21/32 x 3	1-1/4	1-21/32 x 4-5/8	4	5/8	3-1/2	
1-1/2	1-29/32 x 3-3/8	1-1/2	1-29/32 x 5	4	5/8	3-7/8	
2	2-3/8 x 4-1/8	2	2-3/8 x 6	4	3/4	4-3/4	
2-1/2	2-7/8 x 4-7/8	2-1/2	2-7/8 x 7	4	3/4	5-1/2	
3	3-1/2 x 5-3/8	3	3-1/2 x 7-1/2	4	3/4	6	
3-1/2	4 x 6-3/8	3-1/2	4 x 8-1/2	8	3/4	7	
4	4-1/2 x 6-7/8	4	4-1/2 x 9	8	3/4	7-1/2	
4-1/2	5 x 7	4-1/2	5 x 9-1/4	8	3/4	7-3/4	
5	5-9/16 x 7-3/4	5	5-9/16 x 10	8	7/8	8-1/2	
6	6-5/8 x 8-3/4	6	6-5/8 x 11	8	7/8	9-1/2	
7	7-5/8 x 10	7	7-5/8 x 12-1/2	8	7/8	10-3/4	
8	8-5/8 x 11	8	8-5/8 x 13-1/2	8	7/8	11-3/4	
9	9-5/8 x 12-1/2	9	9-5/8 x 15	12	7/8	13-1/4	
10	10-3/4 x 13-3/8	10	10-3/4 x 16	12	1	14-1/4	
12	12-3/4 x 16-1/8	12	12-3/4 x 19	12	1	17	
14	14 x 17-3/4	14	14 x 21	12	1-1/8	18-3/4	
15	15 x 19	15	15 x 22-1/4	16	1-1/8	20	
16	16 x 20-1/4	16	16 x 23-1/2	16	1-1/8	21-1/4	
18	18 x 21-5/8	18	18 x 25	16	1-1/4	22-3/4	
20	20 x 23-7/8	20	20 x 27-1/2	20	1-1/4	25	
22	22 x 26	22	22 x 29-1/2	20	1-1/4	27-1/4	
24	24 x 28-1/4	24	24 x 32	20	1-3/8	29-1/2	
26	26 x 30-1/2	26	26 x 34-1/4	24	1-3/8	31-3/4	
28	28 x 32-3/4	28	28 x 36-1/2	28	1-3/8	34	
30	30 x 34-3/4	30	30 x 38-3/4	28	1-3/8	36	
32	32 x 38	32	32 x 41-3/4	28	1-5/8	38-1/2	
34	34 x 39	34	34 x 43-3/4	32	1-5/8	40-1/2	
36	36 x 41-1/4	36	36 x 46	32	1-5/8	42-3/4	
38	38 x 43-5/8	38	38 x 48-3/4	36	1-5/8	45-1/4	
40	40 x 45-5/8	40	40 x 50-3/4	36	1-5/8	47-1/4	
42	42 x 48	42	42 x 53	36	1-5/8	49-1/2	
44	44 x 50-1/8	44	44 x 55-1/4	40	1-5/8	51-3/4	
46	46 x 52-1/8	46	46 x 57-1/4	40	1-5/8	53-3/4	
48	48 x 54-1/2	48	48 x 59-1/2	44	1-5/8	56	

PLANT FIBRE SHEET (VELLUMOID)

A PREMIUM GRADE OF VEGETABLE FIBRE SHEET PACKING, IMPREGNATED WITH A CHEMICAL BINDER TO RESIST PENETRATION OF LIQUIDS. DESIGNED FOR USE AGAINST GASOLINE, OIL, BENZINE, GREASE, HOT AND COLD WATER.

MAXIMUM TEMPERATURE 250° F.
CERTIFIED TO THE FOLLOWING SPECIFICATIONS;
HH-P-96G, MIL-G-12803A, ASTM D 1170

THICKNESSES .006, .010, .020, .032, .062, .125

CORK SHEET

CORK GRANULES BONDED INTO SHEET FORM. A HIGHLY COMPRESSIBLE MATERIAL FOR OIL AND WATER APPLICATIONS. AVAILABLE IN SHEET OR FABRICATED PARTS. TEMPERATURE RANGE TO 200°F.
THICKNESS 1/32" TO 1/4"

CORK & RUBBER

FINE CORK PARTICLES BLENDED WITH NEOPRENE OR BUNA-N. PROVIDES A GENERAL PURPOSE GASKET MATERIAL WITH MINIMUM SIDE FLOW. FOR OIL, NON-AROMATIC PETROLEUM DERIVATIVES, AND FATTY OILS. TEMPERATURES TO 275°F. THICKNESS 1/32" TO 1/4"

COMPRESSED NON-ASBESTOS SHEET

A *NITRILE* BASED *ARAMID FIBER* SHEET MATERIAL, FORMULATED FOR SERVICE IN MOST STATIC SEALING APPLICATIONS. SUITABLE AGAINST AIR, WATER, BRINE, STEAM, ORGANIC AND WEAK INORGANIC ACIDS, CHEMICALS, PETROLEUM AND PETROLEUM DERIVATIVES, SYNTHETIC OILS, ANIMAL FATS, VEGETABLE OILS, AND REFRIGERANTS. ITS SPECIFIC USE IS STEAM.

MAX TEMPERATURE 750° F
MAX PRESSURE 1600 psi

AVAILABLE IN SHEET FORM AND CUT GASKETS.



THICKNESSES

1/64"
1/32"
1/16"
3/32"
1/8"

SHEET SIZE

59" X 63"

SPONGE RUBBER PRODUCTS

CLOSED CELL



A BLEND OF NEOPRENE/ EPDM/ & SBR, IT IS IMPERVIOUS TO DUST, MOISTURE AND AIR BECUASE THE CELLS ARE NOT INTERCONNECTED. EXCELLENT FOR GASKETING, CUSHIONING, VIBRATION DAMPENING, INSULATION AND WEATHER STRIPPING AND MANY OTHER APPLICATION WHERE A SOFT FLEXIBLE MATERIAL IS NEEDED. LIGHTWEIGHT, VELVET FINISH, BLACK IN COLOR. AVAILABLE IN STRIPS, SHEETS OR DIE CUT GASKETS. WITH OR WITHOUT PRESSURE SENSITIVE ADHESIVE.

TEMPERATURE RANGE -20°F TO 160°F.

SPECIFICATIONS:
 ASTM D 1056-67 SCE41
 MIL-R-6130 II-A

THICKNESSES

1/16"	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	3/4"	1"
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OPEN CELL SPONGE



A NATURAL RUBBER PRODUCT WITH SKIN BOTH SIDES, IT HAS EXCELLENT AGING PROPERTIES. A VERY COMPRESSIBLE MATERIAL. USED FOR GASKETING AGAINST UNEVEN SURFACES AT LOW BOLT PRESSURES.

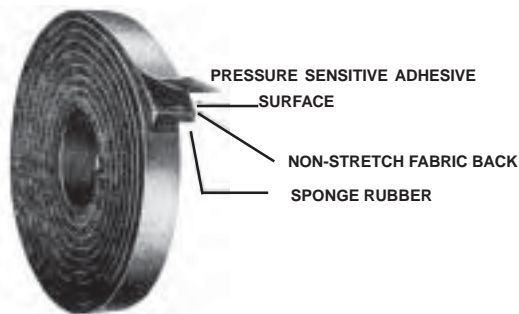
ROLL SIZE
 36"

THICKNESSES

1/16"	3/8"
1/8"	1/2"
3/16"	3/4"
1/4"	1"

DOR-TITE® SPONGE STRIPPING

A FLEXIBLE, RESILIENT CELLULAR MATERIAL READY TO APPLY. IT STICKS TO METAL, GLASS, WOOD ETC.



STOCK SIZES

Dimensions		Packaged Length 50'	Dimensions		Packaged Length 50'/25'
Thick	Width		Thick	Width	
1/8	3/8	SD2350	5/16"	3/8"	SD 5350
1/8	1/2	SD2450	5/16	1/2	SD 5450
1/8	3/4	SD2650	5/16	3/4	SD 5650
1/8	1	SD2850	5/16	1	SD 5850
3/16	1/2	SD3450	7/16	1/2	SD7425 *
3/16	3/4	SD3650	7/16	3/4	SD7625
			7/16	1	SD7825

*25 foot rolls

MECHANICAL PACKINGS



SQUARE BRAIDED PACKINGS ARE MADE IN A WIDE RANGE OF STYLES, TO FIT THE MOST DEMANDING SERVICE. TYPES AVAILABLE ARE: FLAX, RAMIE, ARAMID AND PTFE, EITHER DRY OR LUBRICATED, PLAIN OR GRAPHITED.

SIZE RANGE: 1/8" TO 1"

MECHANICAL PACKING APPLICATION GUIDE BY INDUSTRY

<i>Waste/Water Treatment</i>	<i>Food & Pharmaceutical</i>	<i>Power Generation</i>	<i>Wet Mining/ Slurry</i>	<i>Pulp & Paper</i>	<i>Petrochemical</i>
<ul style="list-style-type: none"> • 1389 - 100% GFO* - Best all around packing available. Heavy graphite loading serves to both increase the rate at which heat is transferred away from the shaft and to reduce thermal expansion yielding longer service life and less shaft/sleeve scoring • VA1389- ePTFE/Graphite/HD Y Cores/Lube. Less expensive alternative to GFO. f • 1030AF - Commercial grade for use in water filtration plants. Exceptionally high sealability for longer service life, lower energy consumption, and less gland follower adjustments. • 1392 - Quadrasyn™ composite which is heavily impregnated. Provides best sealability of any packing made. • 1007AF - Commercial grade packing proven in reciprocating plunger pumps in sewage treatment. • 1607 - Lower cost alternative to above packing. • 2930 - Red rubber for general service as flange and pump gasketing with hot or cold water, low pressure steam and neutral fluids. 	<ul style="list-style-type: none"> • 1367FS - FDA compliant for dynamic applications, non-contaminating, best chemical compatibility • 1367FH - FDA compliant for static applications, non-contaminating, best chemical compatibility, no lube • PalSeal™ FDA compliant, excellent cold flow and creep relaxation resistance (3000) pm • PalPak™ - FDA • 5 compliant valve stem packing (1900) for • 3333 PalSeal™ Sheet FDA compliant sheet 	<ul style="list-style-type: none"> • 5080 - Excellent power plant packing for standardization . • 5010 - Delivers superior service life. Braided flexible graphite with an active corrosion inhibitor and inconel wire for extreme pressure steam valve service. • 5000 - Braided flexible graphite for static and dynamic applications (low pressure steam valves and pumps). • 5000W - Braided flexible graphite "with inconel "wire for static applications only (valve and expansion joint applications), • Palmetto ASH Gaskets For use in United Conveyor, Dresser and Allen Sherman Hoff couplers. Exceptionally suited for hot ash handling (coal fired power generation). • 1389 - 100% GFO* - For water pumps, acid pumps, caustic (lime slurry) pumps and slurry pumps. Heavy graphite loading serves to both increase the rate at which heat is transferred away from the shaft and to reduce thermal expansion yielding longer service life and less shaft sleeve scoring. 	<ul style="list-style-type: none"> 1350 - Para-Aramid (yellow) filament for high pressure/ slurry service packing • 1371 - Meta-Aramid (white) .were strength and a wider pH is required. Excellent for groove gasketing • 1347AF – Cost effective alternative to the Aramids listed above. • 1389 - 100% GFO* - Best all around packing available. Heavy graphite loading serves to both increase the rate at which heat is transferred away from the shaft and to reduce thermal expansion yielding longer service life and less shaft/sleeve scoring. • 1359 - Para-Aramid comer ePTFE and graphite packing. The rugged Aramid prevents ePTFE/ graphite yarn extrusion .white ePTFE graphite yarn dissipates heat and virtually eliminates the shaft scoring tendencies attributed to Aramid yams 	<ul style="list-style-type: none"> • 1389 - 100% GFO* "Best all around packing available. Heavy graphite loading serves to both increase the rate at which heat is transferred away from the shaft and to reduce thermal expansion yielding longer service life and less shaft/sleeve scoring • PE5158 - Palmetto exclusive providing outstanding service in Trunion, Repulpers and Warren Thick Stock Pumps. • 1371 - A meta-Aramid where strength, high pH resistance and non-contaminating White color is required • 1392 - Quadrasyn™ composite which is heavily impregnated. Provides best sealability of any packing made. 	<ul style="list-style-type: none"> • API 607 - Palmetto Fire Safe Ring • PE1000/4010AF ringsets Highly successful in plunger pumps. • 5080 - Braided flexible graphite with carbon nonextrusive corners. For rotating pump and valve packing standardization. • 5000 - Braided flexible graphite for moderate pressure valves (steam/ petrochemical). • 3333 - PalSeal.™ Sheet ePTFE sheet - Heat exchangers and various gasketing applications. • 2940 - Flexible graphite gasketing - Although acceptable for wide range gasketing applications, 2940 is focused on high temperatures.

WEIGHT OF RUBBER SHEETS

APPROXIMATE WEIGHT IN POUNDS PER SQUARE YARD

Thickness	Natural Pure Gum	G R-S	Butyl	Neoprene	Buna N and Paracrylic	Thiokol	Hypalon	Silicone
1/64"	0.71	0.88	0.88	1.02	0.94	1.12	1.04	0.88
1/32"	1.42	1.76	1.76	2.04	1.88	2.24	2.08	1.76
1/16"	2.84	3.52	3.52	4.08	3.76	4.48	4.16	3.52
1/8"	5.68	7.04	7.04	8.16	7.52	8.96	8.32	7.04
1/4"	11.36	14.08	14.08	16.32	15.04	17.92	16.64	14.08
1/2"	22.72	28.16	28.16	32.64	30.08	35.84	33.28	28.16
1"	45.44	56.32	56.32	65.28	60.16	71.68	66.56	56.32

"SHEET PACKING" THE TERM USED BY THE RUBBER INDUSTRY TO DESCRIBE THE MANY NATURAL AND SYNTHETIC SHEET STOCKS THEY MANUFACTURE, IS NOT AN ACCURATE TERM TODAY.

MANY YEARS AGO IT WAS JUST WHAT THE TERM "PACKING" IMPLIES, IT WAS USED TO CUT GASKETS FOR PIPE FITTINGS AND FLANGES. TODAY THE USES OF "SHEET PACKING" ARE UNLIMITED. RUBBER AND RUBBER LIKE SHEET IS USED FOR SUCH THINGS AS: SANDBLAST CURTAINS, LININGS FOR CONVEYING EQUIPMENT HANDLING ABRASIVE MATERIALS, INSULATION, SHOCK ABSORBERS, VIBRATION DAMPENERS, DIAPHRAGMS, ETC.

CAN'T FIND THE PRODUCT YOU WANT? CALL US.

ASTM D-2000 CLASSIFICATION SYSTEM FOR ELASTOMERIC MATERIALS

EXAMPLE: 2BA610 A14 C12 L14

While not a part of the specification itself, the following chart presents the assigned material prefix letters and the polymer such prefix would normally call out. This is the conversion equivalent applicable under:

D-2000 and J-200	D-735 and J-14
AA—Natural, SBR, Butyl, IsopreneR
AK—PolysulphideSA
BA—Ethylene-Propylene, Heat Resistant SBR and Butyl	—
BC—Chloroprene-NeopreneSC
BE—Chloroprene-Neoprene (lower oil swell and comp. set)	—
BF—Nitrile—E14-E34 Requirements	—
BG—Nitrile—E51-E61 RequirementsSB
BK—Organic Dihalide (Thiokol)SA
CA—Ethylene-Propylene	—
CE—Chlorosulfanated Polyethylene (Hypalon)	—
CH—Nitrile	—
DF—Polyacrilic (Butyl-Acrylate Type)	—
DH—PolyacrilicTB
FC—SiliconeTA
FE—Silicone	—
FK—Fluorinated Silicone	—
GE—Silicone	—
HK—Fluorinated Elastomers (Viton)	—

1ST DESIGNATE (2)

Grade number — used to designate supplemental requirements beyond the basic call out. Your supplier can develop this.

2ND DESIGNATE (B)

Indicative of heat resistant requirements at which polymer shall be tested. (See Table 1.)

**TABLE 1
BASIC REQUIREMENTS FOR ESTABLISHING TYPE BY TEMPERATURE**

Type	Test Temperature		Type	Test Temperature	
	°C	°F		°C	°F
A	70	158	F	200	392
B	100	212	G	225	437
C	125	257	H	250	482
D	150	302	J	275	527
E	175	347			

3RD DESIGNATE (A)

Indicative of degree of oil resistance as measured by volume swell under test procedures. (See Table 2.)

TABLE 2 — BASIC REQUIREMENTS FOR ESTABLISHING CLASS BY VOLUME SWELL

Class	Volume Swell, Max. %	Class	Volume Swell, Max. %
A	No requirement	F	60
B	140	G	40
C	120	H	30
D	100	J	20
E	80	K	10

4TH DESIGNATE (6)

Indicative of hardness required, as 60 ± 5 Shore "A"

5TH AND 6TH DESIGNATE (1 & 0)

Indicative of tensile strength required, as 1,000 PSI written in hundreds of PSI

7TH DESIGNATE

The suffix letters (A, C, L) indicate supplemental requirements for particular applications that set up more rigid test procedures — beyond the basic call out. (See Table 3.)

TABLE 3 — MEANING OF SUFFIX LETTERS

Suffix Letter	Test Required	Suffix Letter	Test Required
A	Heat Resistance	J	Abrasion Resistance
B	Compression Set	K	Adhesion
C	Ozone or Weather Resistance	L	Water Resistance
D	Compression Deflection Resistance	M	Flammability Resist.
E	Fluid Resistance	N	Impact Resistance
F	Low Temperature Resistance	P	Staining Resistance
G	Tear Resistance	R	Resilience
H	Flex Resistance	Z	Any special requirement to be specified in detail

8TH DESIGNATE

The suffix numbers (14, 12, 14) indicate the ASTM test method applicable by the first digit. (See Table 4.)

9TH DESIGNATE

The suffix numbers, (in this case 14-12-14) the second digit denotes the temperature at which the test shall be conducted. (See Table 5.)

TABLE 5

**FOR SUFFIX LETTERS
A-B-C-E-G-K-L**

- 1 = 73 Deg. F.
- 2 = 100 Deg. F.
- 3 = 158 Deg. F.
- 4 = 212 Deg. F.
- 5 = 257 Deg. F.
- 6 = 302 Deg. F.

**FOR SUFFIX LETTER:
F**

- 4 = Zero Deg. F.
- 5 = Minus 13 Deg. F.
- 6 = Minus 31 Deg. F.
- 7 = Minus 40 Deg. F.
- 8 = Minus 58 Deg. F.
- 9 = Minus 67 Deg. F.
- 10 = Minus 85 Deg. F.
- 11 = Minus 103 Deg. F.

SPECIFICATION SHEET PACKINGS

SPECIFICATION	GRADE TYPE OR CLASS	DESCRIPTION OF PRODUCT		
		ELASTOMER	HARDNESS (+ or - 5)	OTHER
MIL-P-1384	Class-I	Neoprene		C. I. Packing
MIL-P-1384	Class-2	GR-S		C. I. Packing
MIL-R-900D		GR-S	40 Duro	Black
M1L-R-1149A	Type 1 Cass 1	Neoprene	50 Duro	Black
MIL-R-1149A	Type I Class 2	GR-S	50 Duro	Black
MIL-R-1149A	Type II Class 1	Neoprene	70 Duro	Black
MIL-R-3065	RS410	GR-S	40 Duro	Black
MIL-R-3065	RN415	Rubber	40 Duro	Black
MIL-R-3065	RN430	Rubber	40 Dura	Tan Pure Gum
MIL-R-3065	RN430	Rubber	40 Duro	Red Pure Gum
MIL-R-3065	RN512	Rubber	50 Duro	Black
MIL-R-3065	RN610	Rubber	60 Duro	Black
MIL-R-3065	RN635	Rubber	60 Duro	Chute Lining
MIL-R-3065	RS805	GR-S	80 Duro	Red Sheet
MIL-R-9065	RS805	GR-S	80 Duro	Black Sheet
MIL-R-3065	RS805	GR-S	80 Duro	C. I. Packing
MIL-R-3065	RS810	GR-S	80 Duro	C. I. Packing
MIL-R-3065	SB415	Nitrile	40 Duro	Low Temp. -65°F
MIL-R-3065	SB615	Nitrile	60 Duro	Low Temp. -65°F
MIL-R-3065	SC415	Neoprene	40 Duro	Black
MIL-R-3065	SC415	Neoprene	40 Duro	Low Temp. -65°F
MIL-R-3065	SC515	Neoprene	50 Duro	Black
MIL-R-3065	SC612	Neoprene	60 Duro	C. I. Packing
MIL-R-3065	SC615	Neoprene	60 Duro	Black
MIL-R-3065	SC615	Neoprene	60 Duro	Low Temp. -65°F
MIL-R-3065	SC712	Neoprene	70 Duro	Black
MIL-R-6855	Class I Grade 40	Nitrile	40 Duro	Low Temp. -65°F
MIL-R6855	Class I Grade 60	Nitrile	60 Duro	Low Temp. -65°F
MIL-R-6855	Class II Grade 40	Neoprene	40 Duro	Low Temp. -65°F
MIL-R-6855	Class II Grade 60	Neoprene	60 Duro	Low Temp. -65°F
MIL-S-15058	Type III Class 1	Neoprene	60 Duro	Low Water Absorbtion

WE HAVE MANY PRODUCTS NOT INCLUDED IN THIS CATALOG.....
IF YOU CAN'T FIND THE MATERIAL YOU NEED CALL US.....WE MAY HAVE OR CAN GET
JUST WHAT YOU ARE LOOKING FOR. WE ARE ALWAYS ADDING NEW ITEMS TO OUR
PRODUCT LINE. PLEASE SEND US YOUR ORDERS AND INQUIRIES FOR ITEMS NOT
LISTED.....THANKS

PROPERTIES AND PERFORMANCE

RATINGS ARE IN DECREASING ORDER: OUTSTANDING, EXCELLENT, GOOD, FAIR, POOR			1	2	3	4	5	6		
COMMON NAME			NATURAL RUBBER	SYNTHETIC RUBBER	SBR	BUTYL	POLYBUTADIENE	EP RUBBER		
WEIGHT OF BASE ELASTOMER	LB/CU IN.		0.033	0.033	0.034	0.033	0.034	0.031		
	SPEC.GR		0.93	0.93	0.94	0.92	0.94	0.86		
PHYSICAL PROPERTIES FOR ELASTOMER COMPOUNDS	DUROMETER RANGE		20-100	40-100	40-100	30-80	45-80	30-90		
	RESILIENCE		OUTSTANDING	OUTSTANDING	GOOD	FAIR	OUTSTANDING	GOOD		
	TENSILE STRENGTH, PSI ELONGATION		4000	2000-3000	2000	2000	2500	2000-3000		
	ELONGATION, % REINFORCED		800	300-700	450	300-800	450	500		
	DRIFT, ROOM TEMP		EXCELLENT	GOOD	EXCELLENT	FAIR	GOOD	FAIR		
	COMPRESSION SET		GOOD	FAIR	GOOD	FAIR	FAIR	FAIR		
	ELECTRICAL RESISTIVITY		EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT		
	IMPERMEABILITY, GAS		GOOD	GOOD	FAIR	OUTSTANDING	GOOD	GOOD		
RESISTANCE PROPERTIES	MECHANICAL	RESISTANCE TO	IMPACT	EXCELLENT	EXCELLENT	EXCELLENT	GOOD	GOOD	GOOD	
			ABRASION	EXCELLENT	EXCELLENT	EXCELLENT	GOOD	EXCELLENT	GOOD	
			TEAR	EXCELLENT	GOOD	FAIR	GOOD	GOOD	POOR	
			CUT GROWTH	EXCELLENT	EXCELLENT	GOOD	EXCELLENT	FAIR	GOOD	
	TEMPERATURE	TENSILE STRENGTH PSI AT	250 F	1800	1800	1200	1000	1200	2000	
			400 F	125	125	170	350	170	400	
		ELONGATION, % AT	250 F	500	500	250	250	250	300-500	
			400 F	80	80	60	80	60	0-120	
		DRIFT AT 212 F		GOOD	GOOD	GOOD	FAIR	GOOD	FAIR	
		HEAT AGING AT 212 F		GOOD	FAIR	GOOD	EXCELLENT	FAIR	EXCELLENT	
		FLAME RESISTANCE		POOR	POOR	POOR	POOR	POOR	POOR	
		LOW TEMPERATURE	STIFFENING, F	-20 TO -50	-20 TO -50	0 TO -50	-10 TO -40	-30 TO -60	-20 TO -50	
	BRITTLE POINT, F		-80	-80	-80	-50	-100	-90		
	ENVIRONMENTAL	WEATHER		FAIR	FAIR	FAIR	EXCELLENT	FAIR	EXCELLENT	
		OXIDATION		GOOD	EXCELLENT	GOOD	EXCELLENT	EXCELLENT	GOOD	
		OZONE		POOR	POOR	POOR	EXCELLENT	POOR	EXCELLENT	
		RADIATION		FAIR TO GOOD	FAIR TO GOOD	GOOD	POOR	POOR	POOR	
		WATER		EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	GOOD TO EXCELLENT	
		ACID		FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	EXCELLENT	FAIR TO GOOD	GOOD TO EXCELLENT	
		ALKALI		FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	EXCELLENT	FAIR TO GOOD	GOOD TO EXCELLENT	
		GASOLINE, KEROSENE, ETC,(ALIPHATIC HYDROCARBONS)		POOR	POOR	POOR	POOR	POOR	POOR	
		BENZOL, TOLUOL, ETC, (AROMATIC HYDROCARBONS)		POOR	POOR	POOR	FAIR TO GOOD	POOR	FAIR	
		DEGREASER SOLVENTS(HALOGENATED HYDROCARBONS)		POOR	POOR	POOR	POOR	POOR	POOR	
		ALCOHOL		GOOD	GOOD	FAIR	EXCELLENT	FAIR TO GOOD	POOR	
		SYNTHETIC LUBRICANTS (DIESTER)		POOR TO FAIR	POOR TO FAIR	POOR	FAIR	POOR TO FAIR	POOR TO FAIR	
		HYDRAULIC FLUIDS	SILICATES	POOR	POOR	POOR TO FAIR	FAIR	POOR	FAIR TO GOOD	
			PHOSPHATES	POOR TO FAIR	POOR TO FAIR	POOR	GOOD	POOR TO FAIR	GOOD TO EXCELLENT	
		SUBJECTIVE PROPERTIES	TASTE		FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	GOOD
			ODOR		FAIR TO GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
	NONSTAINING		POOR TO GOOD	EXCELLENT	POOR TO GOOD	GOOD	GOOD	GOOD		
	BONDING TO RIGID MATERIALS			EXCELLENT	EXCELLENT	EXCELLENT	FAIR TO EXCELLENT	EXCELLENT	POOR	

FOR 14 TYPES OF ELASTOMERS

7	8	9	10	11	12	13	14
NEOPRENE	NBR	THIOLKOL	POLYURETHANE	SILICONE	HYPALON	ACRYLIC	FLUORELASTOMERS
0.004	0.036	0.048	0.039	0.036	0.040	0.040	0.05-0.07
1.23	1.00	1.34	1.05	0.95	1.10	1.10	1.4 to 1.95
20-95	20-90	20-80	55-100	25-80	50-95	40-90	65-90
EXCELLENT	GOOD	FAIR	GOOD TO EXCELLENT	POOR TO EXCELLENT	GOOD	GOOD	FAIR
3000	1000-3500	500-150	4000-8000	600-1500	1500-250	1700	1500-3000
650-850	400-600	200-50	250-800	90-800	250-500	450	100-450
FAIR TO GOOD	GOOD	POOR	GOOD TO EXCELLENT	FAIR TO EXCELLENT	FAIR	FAIR	GOOD
FAIR TO GOOD	GOOD	POOR TO FAIR	EXCELLENT	GOOD TO EXCELLENT	FAIR TO GOOD	FAIR TO GOOD	GOOD TO EXCELLENT
FAIR	POOR	FAIR	GOOD	EXCELLENT	GOOD	FAIR	GOOD
GOOD	GOOD	EXCELLENT	GOOD	FAIR	EXCELLENT	GOOD	EXCELLENT
[Hatched Row]							
GOOD	FAIR	POOR	EXCELLENT	POOR TO FAIR	FAIR TO GOOD	POOR	POOR TO GOOD
GOOD TO EXCELLENT	EXCELLENT	POOR TO FAIR	EXCELLENT	POOR TO GOOD	GOOD	FAIR TO GOOD	GOOD
GOOD	GOOD	POOR TO FAIR	EXCELLENT	POOR TO GOOD	FAIR TO GOOD	FAIR	POOR TO GOOD
GOOD	GOOD	POOR	FAIR TO EXCELLENT	POOR TO GOOD	FAIR TO GOOD	GOOD	POOR TO GOOD
1500	700	700	1830	850	500	1300	300-800
180	130	UNDER 25	200	400	200	225	150-300
350	120	140	300	350	60	400	100-350
0-100	20	UNDER 25	140	200	20	150	50-160
FAIR TO GOOD	EXCELLENT	POOR	EXCELLENT	EXCELLENT	FAIR	FAIR	GOOD TO EXCELLENT
GOOD	GOOD	GOOD	FAIR TO GOOD	EXCELLENT	EXCELLENT	EXCELLENT	OUTSTANDING
GOOD	POOR TO FAIR	POOR	POOR TO FAIR	FAIR TO GOOD	GOOD	POOR TO FAIR	EXCELLENT
+10 TO -20	+30 TO -20	-10 TO -45	-10 TO -30	-60 TO -160	-30 TO -50	+35 TO +10	+20 TO -30
-45	-65	-60	-60	-90 TO -180	-60	-10	+10 TO -60
EXCELLENT	GOOD	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
GOOD	FAIR TO GOOD	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	OUTSTANDING
EXCELLENT	POOR	EXCELLENT	EXCELLENT	EXCELLENT	OUTSTANDING	EXCELLENT	OUTSTANDING
FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD	GOOD	FAIR TO EXCELLENT	FAIR TO GOOD	POOR TO GOOD	FAIR TO GOOD
GOOD	EXCELLENT	GOOD	GOOD	GOOD	GOOD	FAIR	GOOD
GOOD	GOOD	FAIR	POOR TO FAIR	POOR TO GOOD	EXCELLENT	FAIR	GOOD TO EXCELLENT
GOOD	FAIR TO GOOD	GOOD	POOR TO FAIR	POOR TO FAIR	EXCELLENT	POOR	POOR TO GOOD
GOOD	EXCELLENT	EXCELLENT	EXCELLENT	POOR TO FAIR	FAIR	EXCELLENT	EXCELLENT
POOR	GOOD	EXCELLENT	POOR TO FAIR	POOR	POOR TO FAIR	POOR	EXCELLENT
POOR	POOR	FAIR TO GOOD	FAIR TO POOR	POOR TO GOOD	POOR TO FAIR	POOR	GOOD
FAIR	EXCELLENT	GOOD	GOOD	GOOD	GOOD	POOR	EXCELLENT
POOR	FAIR TO GOOD	GOOD	POOR	POOR TO FAIR	POOR	GOOD	FAIR TO GOOD
GOOD	FAIR	POOR TO FAIR	-	POOR	GOOD	GOOD	GOOD
POOR	POOR	POOR TO FAIR	POOR	GOOD	POOR TO FAIR	POOR	POOR
FAIR TO GOOD	FAIR TO GOOD	POOR TO FAIR	GOOD	GOOD	FAIR TO GOOD	FAIR TO GOOD	FAIR TO GOOD
FAIR TO GOOD	GOOD	POOR	GOOD	GOOD	GOOD	FAIR TO GOOD	GOOD
GOOD TO EXCELLENT	POOR TO GOOD	POOR TO FAIR	GOOD	OUTSTANDING	EXCELLENT	GOOD	POOR TO GOOD
GOOD TO EXCELLENT	GOOD TO EXCELLENT	FAIR TO GOOD	FAIR TO GOOD	FAIR TO EXCELLENT	FAIR TO GOOD	GOOD	POOR TO GOOD

**INDUSTRIAL
RUBBER
PRODUCTS**

**SINCE
1921**

COMPARISON CHART ELASTOMERIC PROPERTIES

Property	General purpose non-oil resistant				Oil resistant					Heat — oil resistant		
	Natural rubber Polyisoprene	S. B. R. Butadiene	Butyl	E. P. D. M. Nordel*	Neoprene*	Hypalon*	Nitrile Buna N	Urethane	Thiokol†	Silicone	Acrylate	Fluoro-carbon Viton*
Hardness Shore, A Durometer	30.90	40.90	40.80	40.80	40.95	50.90	40.95	50.95+	40.85	40.85	40.90	60.90
Tensile strength, psi	3000+	1000—	1500+	1000—	3000+	1000+	1000—	4000+	1000—	1000—	1000+	2000+
Pure gum	3000+	2000+	2000+	2000+	3000+	2000+	2000+	4000+	1000+	1000+	2000+	2000+
Reinforced	Excellent	Good	Very Poor	Good	Very Good	Fair	Good	Poor	Fair	Excellent	Good	Good
Rebound, Cold	Excellent	Good	Very Poor	Good	Very Good	Fair	Good	Good	Fair	Excellent	Good	Excellent
Hot	Good	Fair	Good	Fair	Fair to Good	Fair	Fair	Outstanding	Poor	Poor	Fair	Fair
Tear resistance	Very Good	Very Good	Good	Good	Very Good	Good	Good	Outstanding	Poor	Poor	Fair	Good
Abrasion resistance	Fair	Fair	Very Good	Excellent	Very Good	Excellent	Fair	Excellent	Very Good	Very Good	Very Good	Very Good
Ozone resistance	Poor	Poor	Very Good	Excellent	Very Good	Excellent	Poor	Excellent	Very Good	Excellent	Excellent	Excellent
Sunlight aging	Good	Good	Excellent	Excellent	Excellent	Excellent	Good	Very Good	Very Good	Excellent	Excellent	Excellent
Oxidation resistance	Good	Very Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	Outstanding	Excellent	Outstanding
Heat resistance	Good	Very Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent	Fair	Outstanding	Excellent	Outstanding
Solvent resistance												
Aliphatic hydrocarbons	Poor	Poor	Poor	Poor	Good	Good	Excellent	Excellent	Excellent	Poor	Fair	Excellent
Aromatic hydrocarbons	Poor	Poor	Poor	Poor	Fair	Poor	Good	Good	Excellent	Poor	Poor	Excellent
Oxygenated Solvents												
Alcohols (ketones)	Good	Good	Very Good	Very Good	Poor	Poor	Poor	Poor	Very Good	Fair	Poor	Poor
Oil and gasoline resistance	Poor	Poor	Poor	Poor	Good	Good	Excellent	Excellent	Outstanding	Fair	Excellent	Excellent
Organic Oils	Poor to Good	Poor to Good	Excellent	Excellent	Good	Good	Excellent	Excellent	Excellent	Excellent	Excellent	Excellent
Acid resistance												
Dilute	Good	Good	Excellent	Excellent	Very Good	Excellent	Good	Poor	Good	Good	Poor	Excellent
Concentrated	Fair	Fair	Very Good	Very Good	Good	Very Good	Fair	Poor	Fair	Good	Poor	Very Good
Flame resistance	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Poor	Fair	Poor	Good
Permeability to gases	Fair	Fair	Very Low	Fair	Low	Fair	Fair	Low	Very Low	Fair	Fair	Good
Electrical Insulation	Good	Good	Good	Good	Fair	Good	Poor	Fair	Fair	Excellent	Fair	Excellent
Water swell resistance	Fair	Excellent	Excellent	Excellent	Fair	Fair	Excellent	Poor to Good	Excellent	Excellent	Poor	Excellent

*DuPont's Reg. T.M.

†Reg. T.M.

Chemical and/or Trade Name	ASTM Designation	Source
STYRENE-BUTADIENE (GRS, BUNA S)	SBR	
Ameripol		Goodrich Gulf Chemicals, Inc.
FR-S		Firestone Synthetic Rub. & Latex Co.
Philprene		Phillips Petroleum Company
Synpol		Texas- U.S. Chemical Company
BUTADIENE	NBR	
ACRYLONITRILE (BUNA N, NITRILE)		
Hycar		B. F. Goodrich Company
Chemigum		Goodyear Tire & Rubber Company
Paracril		Uniroyal, Inc.
FR-N		Firestone Synthetic Rub. & Latex Co.
Polysar Krynac		Polymer Corp., Ltd. (Canada)
POLYISOPRENE (STEREO RUBBER)	IR	
Natsyn		Goodyear Tire & Rubber Company
Shell Isoprene		Shell Chemical
Ameripol S. N.		Goodrich Gulf Chemicals, Inc.
CHLOROPRENE	CR	
Neoprene		E. I. DuPont
POLYSULFIDE	SA	
Thiokol		Thiokol Chemical Corporation

Chemical and/or Trade Name	ASTM Designation	Source
POLYURETHANE	AU	
Adiprene		E. I. DuPont
Elastothane		Thiokol Chemical Corporation
Genthane		General Tire & Rubber Company
Vibrathane		Uniroyal, Inc.
ISOBUTYLENE ISOPRENE (BUTYL)	IIR	
Bucar		Columbian Carbon
Enjay Butyl		Enjay Chemical
Petro-Tex Butyl		Petro-Tex Chemical Company
Polysar Butyl		Polymer Corp., Ltd. (Canada)
FLUOROCARBON	FPM	
Viton		E. I. DuPont
Fluorel		3M Company
CHLOROSULFONATED POLYETHYLENE	CSM	
Hypalon		E. I. DuPont
ETHYLENE PROPYLENE (E. P. T., E. P. M., E. P. D. M.)		
Nordel		E. I. DuPont
Vistaion		Enjay Chemical
Royalene		Uniroyal, Inc.
Epsyn		Copolymer Rubber & Chem. Corp.

" A CAPITAL NAME IN RUBBER "

SPECIFICATION SHEET PACKING AMS Specifications

AMS SPECIFICATIONS WERE ESTABLISHED BY AIRCRAFT MANUFACTURERS WHO WORKED COLLECTIVELY IN AN EFFORT TO STANDARDIZE AIRCRAFT RUBBER SPECIFICATIONS. THE RESULTING AMS SPECIFICATIONS HAVE LARGELY REPLACED THE DIFFERENT INDIVIDUAL STANDARDS PREVIOUSLY EMPLOYED BY EACH AIRCRAFT COMPANY.

SPEC.NO	HARDNESS	TITLE	SPEC.NO	HARDNESS	TITLE
3195	Med	Closed-Cell Sponge—Silicone	3241	55-65	Weather Resistant-Chlorophene
3196	Firm	Closed Cell Sponge—Silicone	3242	75-85	Weather Resistant-Chlorophene
3197	Soft	Sponge—Chlorophene	3243	55-65	Flame Resistant-Chlorophene
3198	Med.	Sponge—Chlorophene	3244	65-75	Flame Resistant—Chlorophene
3199	Firm	Sponge—Chlorophene	3248	55-65	Phosphate Ester Resistant—E.P.Type
3200	55-65	Hydraulic Fluid(Pet. Base)Resistant	3250	35-45	Synthetic Rubber—Cork
3201	35-45	DryHeatResistant	3251	45-55	Synthetic Rubber—Cork
3202	55-65	DryHeatResistant	3252	55-65	Synthetic Rubber—Cork
3204	25-35	LowTemperature Resistant	3270		Cotton Fabric Reinforced-Chlorophene
3205	45-55	LowTemperature Resistant	3274		Nylon Fabric Reinforced-Aromatic Fuel Res.
3207	25-35	Weather Resistant-Chlorophene	3301	35-45	Silicone—General Purpose
3208	45-55	Weather Resistant-Chlorophene	3302	45-55	Silicone—General Purpose
3209	65-75	Weather Resistant-Chlorophene	3303	55-65	Silicone—General Purpose
3210	65-75	Electrical Resistant-Chlorophene	3304	65-75	Silicone—General Purpose
3212	55-65	AromaticFuel Resistant	3305	75-85	Silicone—General Purpose
3213	75-85	AromaticFuel Resistant	3315		Silicone-Glass Fabric Reinforced
3214	35-45	AromaticFuel Resistant	3320	60-80	Silicone-Glass Fabric Reinforced
3215	65-75	AromaticFuel Resistant	3325	55-65	Silicone-Fuel & Oil Resistant
3220	55-65	Hot Oil and Fuel Resistant	3326	50-65	Silicone—Fuel and Oil Resistant
3222	45-55	Hot Oil Resistant, High Swell	3332	15-30	Silicone—Extreme LowTemp. Resistant
3226	45-55	Hot Oil and Coolant Resistant, Low Swell	3334	35-45	Silicone—Extreme LowTemp. Resistant
3227	55-65	Hot Oil and Coolant Resistant, Low Swell	3335	45-55	Silicone-Extreme Low Temp. Resistant
3228	65-75	Hot Oil and Coolant Resistant, Low Swell	3336	55-65	Silicone—Extreme LowTemp. Resistant
3229	75-85	Hot Oil Resistant, Low Swell	3337	65-75	Silicone—High & Ext.Low Temp. Resistant
3232		Asbestos and Synthetic-Hot Oil	3338	75-85	Silicone—Extreme LowTemp. Resistant
3237	35-45	Butyl-Phosphate Ester Resistant	3345	45-55	Silicone—1000 PSI
3238	65-75	Butyl-Phosphate Ester Resistant	3346	45-65	Silicone—1000 PSI
3239	85-95	Butyl-Phosphate Ester Resistant	3356	55-65	Silicone—LubeOil & CompressionSet Resistant—Electrical Grade
3240	35-45	Weather Resistant-Chlorophene	3357	65-75	Silicone—Lube Oil & Compression Set Resistant



MOLDED AND EXTRUDED PARTS AVAILABLE IN YOUR CHOICE OF ELASTOMERS. WE CAN ALSO PRODUCE SHORT RUNS. PLEASE SEND US YOUR INQUIRIES.

