

1 SEPTUM MATERIAL

NATURAL RUBBER

(NR) has excellent mechanical and elastic properties and is highly tear resistant. Due to the influence of sunlight and ozone aging capability is poor. For non-corrosive materials, and acidic and alcoholic solutions this material is adequate.

Although its chemical resistance in general is moderate, short exposure time (e.g. less than 24 hours, as is not unusual in sampling situations) allows for application with many more aggressive chemicals.

ETHYLEN PROPYLEN DIANE MONOMER RUBBER

(EPDM) has good mechanical and elastic properties, good aging and chemical resistance capabilities. A low cost combined with the above features makes this septum a very good choice.

SILICONE RUBBER

(SR) has good mechanical and elastic properties. Its prime advantages are excellent heat-resistance and non-oxidizing properties. The complicated fabrication however makes it relatively expensive. Almost no aging occurs, and it is inert to most solvents with the possible exception of the aliphatic type.

PTFE COATED BUTYL

(TCB) the combination of these two materials provide the best choice when considering elasticity properties and chemical and tear resistance. The elasticity and high tear-resistance of the butyl is combined with the almost total chemical inertness of the PTFE (thickness .2mm). The PTFE faces the sample liquid, providing optimal chemical compatibility; the butyl rubber backing provides the seal, only a very large tear would allow contact between the butyl rubber and the sample medium, therefore this septum should only be used with small needle sizes.

PTFE COATED SILICONE

(TCS) incorporates the advantages of silicone and PTFE. The heat-resistance of both materials and the total chemical inertness of the PTFE (thickness 0.2mm) make this septum the best choice when sampling at elevated temperatures. The PTFE faces the sample liquid in the same manner as the PTFE coated butyl septum, therefore attention to the needle sizes should be considered when using this material.

VITON

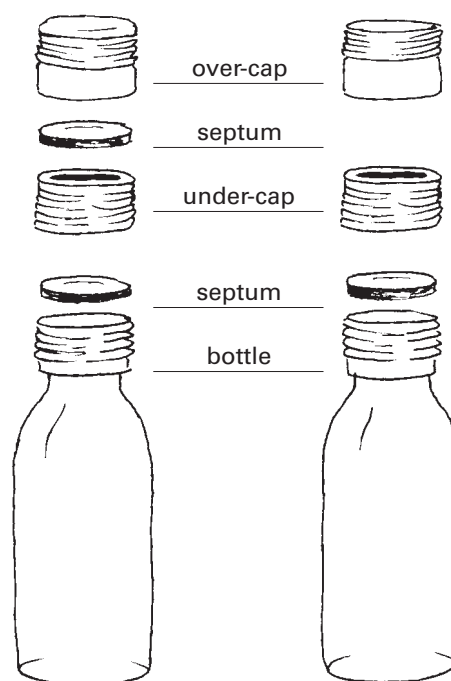
(FKM, fluor elastomer or fluorcarbon rubber) has only moderate mechanical and elastic properties. Prime advantages are the high maximum temperature (210°C–410°F) and good chemical resistance towards most materials and solutions.

2 SPECIFICATIONS

Material	Sealing capacity	Temperature limit (°C) (°F)		Aging resistance	General chemical resistance	Max. needle size (mm)
Natural rubber	A	120	250	C	C	6
EPDM	A	125	260	A	B	6
Silicone rubber	B	220	430	A	B	3
PTFE coated butyl	B	145	295	A	A	3
PTFE coated silicone	B	220	430	A	A	3
Viton	C	250	480	A	A	3

A = excellent B = good C = moderate

Part No.	Material	Nominal ø (mm)	Nominal thickness (mm)
1120000	Natural rubber	25	3
1120100	Natural rubber	28	3
1124200	Natural rubber	32	3
1120200	Natural rubber	36	4
1120300	Natural rubber	45	3
1120400	EPDM	25	3
1120500	EPDM	28	3
1124300	EPDM	32	3
1120600	EPDM	36	3
1120700	EPDM	45	3
1120800	Silicone	25	3
1120900	Silicone	28	3
1124400	Silicone	32	3
1121000	Silicone	36	3
1121100	Silicone	45	3
1121600	PTFE coated Butyl	25	3
1121700	PTFE coated Butyl	28	3
1124100	PTFE coated Butyl	32	3
1121800	PTFE coated Butyl	36	4
1121900	PTFE coated Butyl	45	3
1122000	PTFE coated Silicone	25	3
1122100	PTFE coated Silicone	28	3
1123900	PTFE coated Silicone	32	3
1122200	PTFE coated Silicone	36	3
1122300	PTFE coated Silicone	45	3
1122400	Viton	25	3
1122500	Viton	28	3
1124500	Viton	32	3
1122600	Viton	36	3
1122700	Viton	45	3



Dimensions given are nominal and refer to closure of sample container. Actual dimensions are smaller.

For any other information required, consult the Sales Department at Bergschenhoek or Houston or your local representative.

Dopak Inc.

Houston, Texas 77041, USA
 Phone 713-460-8311
 Fax 713-460-8578
 E-mail info@dopak.com

Dovianus BV

Bergschenhoek, The Netherlands
 Phone +31 10 524 20 00
 Fax +31 10 456 67 74
 E-mail info@dopak.nl

Your local representative: