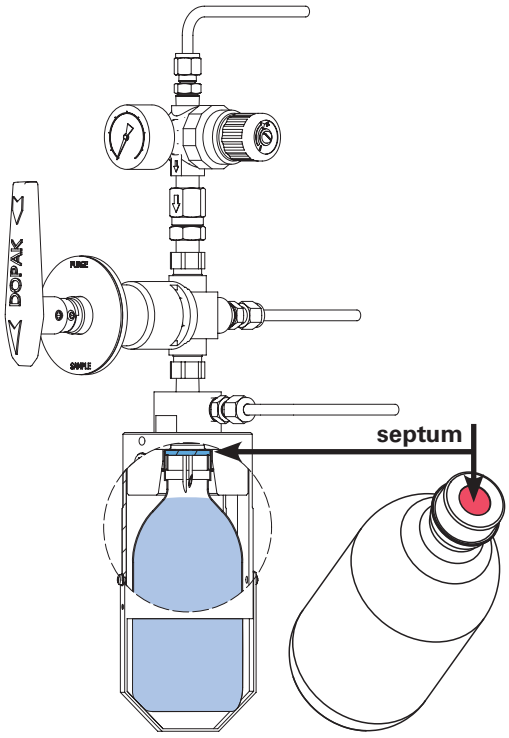
DOPAK®
Sampling Systems

DOPAK® Component sheet
Septa





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 resistance is moderate. For non-corrosive materials, and acidic and alcoholic solutions this material is suitable.
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.

ETHYLENE PROPYLENE DIENE MONOMER RUBBER (EPDM) has good mechanical and elastic properties, excellent aging and good 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 0.2 mm). 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 can only be used with smaller 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 0.2 mm) 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.

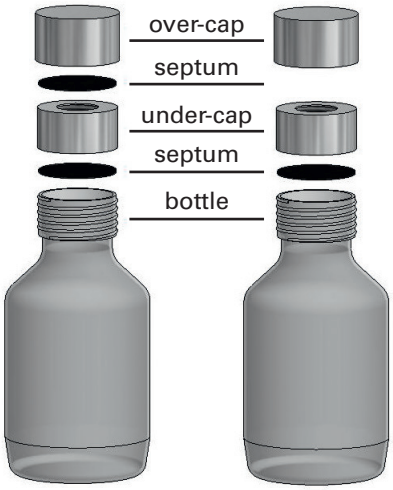
VITON (FKM, fluor elastomer or fluorcarbon rubber) has only moderate mechanical and elastic properties. Prime advantages are the high maximum temperature is 210 °C (410 °F) and good chemical resistance towards most materials and solutions.

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	1.35

A = excellent B = good C = moderate

Part no.	Material	Cap size	Nominal thickness (mm)
1120000	Natural rubber	pp25	3
1120100	Natural rubber	pp28	3
1124200	Natural rubber	GL32	3
1120200	Natural rubber	pp36	4
1120300	Natural rubber	GL45	3
1120400	EPDM	pp25	3
1120500	EPDM	pp28	3
1124300	EPDM	GL32	3
1120600	EPDM	pp36	3
1120700	EPDM	GL45	3
1120800	Silicone	pp25	3
1120900	Silicone	pp28	3
1124400	Silicone	GL32	3
1121000	Silicone	pp36	3
1121100	Silicone	GL45	3
1121600	PTFE coated butyl	pp25	3
1121700	PTFE coated butyl	pp28	3
1124100	PTFE coated butyl	GL32	3
1121800	PTFE coated butyl	pp36	4
1121900	PTFE coated butyl	GL45	3
1122000	PTFE coated silicone	pp25	3
1122100	PTFE coated silicone	pp28	3
1123900	PTFE coated silicone	GL32	3
1122200	PTFE coated silicone	pp36	3
1122300	PTFE coated silicone	GL45	3
1122400	Viton	pp25	3
1122500	Viton	pp28	3
1124500	Viton	GL32	3
1124600	Viton	pp36	3
1122700	Viton	GL45	3



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

For more information please contact our sales department at Bergschenhoek or Houston or your local representative.

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