

## Material Data Sheet

Fibre materials - Frenzelit									
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density	
isoplan® 750	bio/mineral ceramic fibre	white					750	0.94	
novaform® SK	aramid/NBR	anthracite	see data sheets and					400	1.90
novaphit® SSTC	graphite/expanded metal	anthracite						550	1.30
novapress® MULTI II	aramid/graphite/NBR	blue	PT diagrams					400	1.50
novapress® ACTIV	aramid/NR/NBR	brown/red						250	1.45
novapress® MULTI EG	aramid/NR/NBR	anthracite	of the respective manufacturers					500	1.60
novapress® UNIVERSAL	aramid/NBR	green						300	1.80
novatec® PREMIUM	graphite/Kevlar/NBR	blue						350	1.70
novatec® SPECIAL	graphite/Kevlar/NBR	orange						360	1.00
novapress® 815	aramid/NBR	green						250	1.35

Fibre materials – Hecker								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
CENTELLEN® WS 3822	aramid/NBR	yellow/green					350	1.80

Fibre materials – Klinger									
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density	
KLINGER® graphit HL	graphite without insert	anthracite					400	1.00	
KLINGER® graphit PSE	graphite with tanged steel	anthracite	see data sheets and					500	1.00
KLINGER® graphit SLS	graphite with smooth sheet	anthracite						500	1.00
KLINGERSIL® C-4106	synthetic fibre/cork/NBR	brown	PT diagrams					200	1.00
KLINGERSIL® C-4400	aramid/NBR	green						400	1.60
KLINGERSIL® C-4409	synthetic fibre/NBR/ expanded metal	green	of the respective manufacturers					400	2.00

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Fibre materials – Klinger								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
KLINGERSIL® C-4430	synthetic fibre/NBR	green	see data sheets and				400	1.75
KLINGERSIL® C-4500	carbon fibre/NBR	grey	PT diagrams				400	1.60
KLINGERSIL® C-4509	carbon fibre/NBR/ expanded metal	grey					400	2.00
KLINGERSIL® C-8200	glass fibre/elastomere	green	of the respective manufacturers				250	1.70
KLINGER® top-chem 2000	PTFE	grey					400	3.00

Fibre materials – Reinz								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
AFM 30	aramid/elastomere	green					400	1.7-1.95
AFM 31	aramid/elastomere	red					250	1.4-1.7
AFM 38	aramid/elastomere	green					300	1.5-1.7
AFM 39	aramid/elastomere	light grey					300	1.8-2.0

Foamed materials								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
cellular rubber - EPDM quality	foamed EPDM	black	3	4	3	3	100	0.15
cellular rubber - CR quality	foamed CR	black	3	3	3	3	100	0.17
Vulkollan foam	foamed Vulkollan	beige	2	3	4	4	80	0.35
silicone foam	foamed silicone	pale	3	4	3	3	200	0.35
foam rubber – EPDM quality	foamed EPDM	Black	3	4	3	3	100	0.50

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Plastic materials								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
PTFE virginal	PTFE	white	1	1	1	1	260	2.1-2.3
Polyurethane D44	polyurethane	brown	1	2	3	3	60	1.24
Soft PVC transparent	PVC	transparent	4	4	3	3	60	1.35

Elastomere - Semperit								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
CIIR-EPDM - 60 Shore - B 1743	butyl EPDM	black	4	4	1	1	100	1.11
CR-SBR - 65 Shore - N 9581	CR/SBR	black	4	4	3	3	70	1.40
EPDM - 70 Shore - E 9614	EPDM	black	4	4	2	1	120	1.22
EPDM - 50 Shore - E 4580	EPDM	black	4	4	2	1	100	1.05
EPDM - 70 Shore - E 9566	EPDM	black	4	4	2	1	100	1.30
EPDM - 70 Shore KTW - E 628	EPDM	black	4	4	1	1	120	1.12
EPDM - 80 Shore - E 9575	EPDM	black	4	4	3	2	100	1.30
NBR-NR - 60 Shore white - P 627	NBR/NR	white	3	4	2	2	80	1.32
NBR-SBR - 80 Shore - P 9548	NBR/SBR	black	2	3	3	3	70	1.45
NBR gas - 80 Shore - P 518	NBR	black	1	2	2	2	80	1.35
NBR super - 60 Shore - P 534	NBR	black	1	1	2	2	80	1.19
NBR-SBR - 50 Shore - P 9639	NBR/SBR	black	2	4	3	3	70	1.25
NBR-SBR - 65 Shore - P 9540	NBR/SBR	black	1	1	3	3	70	1.45
NR-SBR - 60 Shore - A 590	NR/SBR	black	4	4	3	2	70	1.15
NR-SBR - 65 Shore white - A 621	NR/SBR	white	4	4	3	2	70	1.43
NR-SBR - 50 Shore white - A 618	NR/SBR	white	4	4	3	2	70	1.28
NR-SBR - 70 Shore - A 9506	NR/SBR	black	4	4	3	3	70	1.46
PARA beige - 40 Shore - A 560	NR/SBR	beige	4	4	3	2	70	1.06

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Elastomere - Semperit								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
PARA grey - 40 Shore - A 160	NR/SBR	grey	4	4	3	2	70	1.08

Elastomere - Import								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
CR/SBR - 65 Shore - import quality	CR/SBR	black	4	4	3	3	70	1.45
CR/SBR 60 Shore white - import quality	CR/SBR	white	4	4	3	3	70	1.40
EPDM - 50 Shore - import quality	EPDM/SBR	black	4	4	2	1	100	1.35
EPDM - 65 Shore - import quality	EPDM/SBR	black	4	4	2	1	100	1.30
NBR/SBR - 65 Shore - import quality	NBR/SBR	black	1	1	3	3	70	1.45
NR/SBR - 65 Shore white - import quality	NR/SBR	white	4	4	3	2	70	1.50
NR/SBR - 70 Shore - import quality	NR/SBR	black	4	4	3	3	70	1.50
PARA grey - 40 Shore - import quality	NR/SBR	grey	4	4	3	2	70	1.08
fine-grooved matting black	NR/SBR	black	4	4	3	3	70	1.55
fine-grooved matting grey	NR/SBR	grey	3	4	3	3	70	1.68

Elastomere - various								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
Perbunan Super A-NT-6800	NBR	black	1	2	3	3	120	1.42
CSM e.g. Hypalon - 65 Shore	CSM	black	2	4	2	2	125	1.30
FKM e.g. Viton - 75 Shore	FKM	black	2	2	2	4	275	1.96

## Material Data Sheet

Elastomere – various								
Material name	Material basis	Colour	Oil	Petrol	Acid	Base	Temperature °C	Density
Silicone transparent - 40/50/60 Shore	VMQ	transparent	4	4	2	2	200	1.15
Silicone red - 60 Shore	VMQ	red	4	4	2	2	250	1.15

The temperature specifications are maximum values, which can only be reached under ideal conditions (see PT diagram Frenzelit / Klinger / Reinz / Hecker). All technical data has been determined with standard material under laboratory conditions. With the large number of possible installation- and operating conditions can be derived from no warranty for the behavior of a flanged joint. Product changes in the interest of technical progress we reserve the right.

Steinbach AG