

kaiflex[®] ST

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KAIFLEX ST

PRODUCT BROCHURE

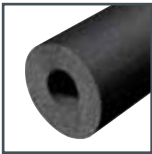


The Insulation for the Cooling Sector

- Fire rating Class 0
- Highly flame retardant B-s3,d0
- Water vapour resistance factor $\mu \geq 10.000$
- Thermal conductivity $\lambda_{0^\circ\text{C}} \leq 0,034 \text{ W/(m}\cdot\text{K)}$



KAIMANN
foam technology of tomorrow



KAIFLEX ST

Tubes · Length: 2 m · Colour: Black

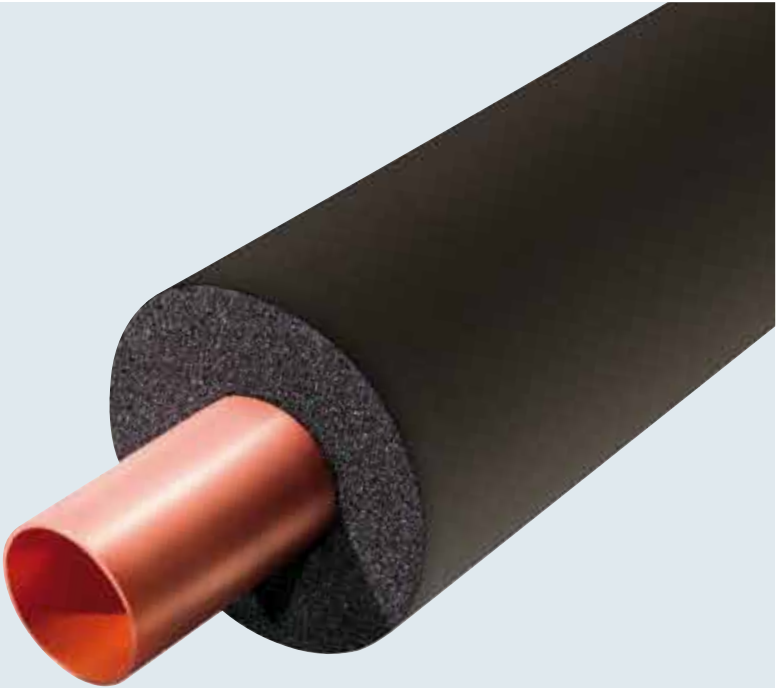
Copper pipes CU		Steel pipes FE			6 mm			9 mm		
External ø mm	Nominal width DN	Inches	External ø mm	Nominal width DN	Dimension	Article no.	m / box	Dimension	Article no.	m / box
6	4				6 x 6	17006006	600	9 x 6	17009006	360
8	6				6 x 8	17006008	500	9 x 8	17009008	340
10	8	1/8	10,2	6	6 x 10	17006010	430	9 x 10	17009010	320
12	10		12,5		6 x 12	17006012	350	9 x 12	17009012	280
15	10	1/4	13,5	8	6 x 15	17006015	300	9 x 15	17009015	240
18	15	3/8	17,2	10	6 x 18	17006018	280	9 x 18	17009018	190
22	20	1/2	21,3	15	6 x 22	17006022	216	9 x 22	17009022	156
25	20		25,0		6 x 25	17006025	180	9 x 25	17009025	130
28	25	3/4	26,9	20	6 x 28	17006028	150	9 x 28	17009028	124
30	25		30,0		6 x 30	17006030	140	9 x 30	17009030	100
								9 x 32	17009032	92
35	32	1	33,7	25	6 x 35	17006035	120	9 x 35	17009035	92
38	32		38,0					9 x 38	17009038	80
42	40	1 1/4	42,4	32				9 x 42	17009042	70
			44,5					9 x 45	17009045	60
		1 1/2	48,3	40				9 x 48	17009048	60
54	50		54,0					9 x 54	17009054	60
57	50		57,0					9 x 57	17009057	60
		2	60,3	50				9 x 60	17009060	60
64			63,5					9 x 64	17009064	54
67										
70			70,0					9 x 70	17009070	54
76,1	65	2 1/2	76,1	65				9 x 76	17009076	54
80								9 x 80	17009080	40
88,9	80	3	88,9	80				9 x 89	17009089	36
		3 1/2	101,6					9 x 102	17009102	28
108	100		108,0					9 x 108	17009108	28
114	100	4	114,3	100				9 x 114	17009114	28
			125,0					9 x 125	17009125	20
133	125		133,0					9 x 133	17009133	16
		5	139,7	125				9 x 140	17009140	16
159	150		160,0					9 x 160	17009160	14

highly flame retardant ■ B1-s3, d0

kaiflex[®] ST

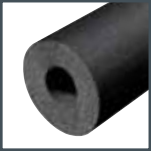
The Insulation for the Cooling Sector

KAIFLEX ST is a high quality insulation system. With its good technical quality **KAIFLEX ST** guarantees a low thermal conductivity and a very high water vapour resistance factor. With its good technical performance **KAIFLEX ST** is the ideal product for condensation prevention and energy loss limitation where piping, ducting, chillers and air conditioning equipment are concerned. Thanks to the highly flexible, closed-cell insulation a long life span of the insulated project is guaranteed. **KAIFLEX ST** is ideal for the refrigeration, air conditioning, chilled and industrial market sectors. The high efficiency of the product is guaranteed by supervision by approved test institutes in combination with a constant inhouse supervision.



KAIFLEX ST

Tubes · Length: 2 m · Colour: Black



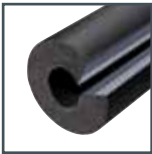
Copper pipes CU		Steel pipes FE			13 mm			19 mm		
External ø mm	Nominal width DN	Inches	External ø mm	Nominal width DN	Dimension	Article no.	m / box	Dimension	Article no.	m / box
6	4				13 x 6	17013006	240	19 x 6	17019006	126
8	6				13 x 8	17013008	210			
10	8	1/8	10,2	6	13 x 10	17013010	190	19 x 10	17019010	106
12	10		12,5		13 x 12	17013012	172	19 x 12	17019012	100
15	10	1/4	13,5	8	13 x 15	17013015	154	19 x 15	17019015	86
18	15	3/8	17,2	10	13 x 18	17013018	130	19 x 18	17019018	78
22	20	1/2	21,3	15	13 x 22	17013022	110	19 x 22	17019022	74
25	20		25,0		13 x 25	17013025	92	19 x 25	17019025	60
28	25	3/4	26,9	20	13 x 28	17013028	86	19 x 28	17019028	58
30	25		30,0		13 x 30	17013030	84	19 x 30	17019030	58
					13 x 32	17013032	76	19 x 32	17019032	54
35	32	1	33,7	25	13 x 35	17013035	76	19 x 35	17019035	48
38	32		38,0		13 x 38	17013038	66	19 x 38	17019038	44
42	40	1 1/4	42,4	32	13 x 42	17013042	56	19 x 42	17019042	40
			44,5		13 x 45	17013045	52	19 x 45	17019045	34
		1 1/2	48,3	40	13 x 48	17013048	48	19 x 48	17019048	30
54	50		54,0		13 x 54	17013054	46	19 x 54	17019054	30
57	50		57,0		13 x 57	17013057	44	19 x 57	17019057	28
		2	60,3	50	13 x 60	17013060	40	19 x 60	17019060	28
64			63,5		13 x 64	17013064	40	19 x 64	17019064	28
67					13 x 67	17013067	40	19 x 67	17019067	28
70			70,0		13 x 70	17013070	40	19 x 70	17019070	28
76,1	65	2 1/2	76,1	65	13 x 76	17013076	34	19 x 76	17019076	28
80					13 x 80	17013080	30	19 x 80	17019080	26
88,9	80	3	88,9	80	13 x 89	17013089	30	19 x 89	17019089	22
		3 1/2	101,6		13 x 102	17013102	30	19 x 102	17019102	20
108	100		108,0		13 x 108	17013108	28	19 x 108	17019108	20
114	100	4	114,3	100	13 x 114	17013114	28	19 x 114	17019114	18
			125,0		13 x 125	17013125	20	19 x 125	17019125	18
133	125		133,0		13 x 133	17013133	18	19 x 133	17019133	12
		5	139,7	125	13 x 140	17013140	18	19 x 140	17019140	10
159	150		160,0		13 x 160	17013160	16	19 x 160	17019160	8

highly flame retardant ■ B₁-s3, d0

Copper pipes CU		Steel pipes FE			25 mm			32 mm		
External ø mm	Nominal width DN	Inches	External ø mm	Nominal width DN	Dimension	Article no.	m / box	Dimension	Article no.	m / box
6	4				25 x 6	17025006	80			
10	8	1/8	10,2	6	25 x 10	17025010	72			
12	10		12,5		25 x 12	17025012	60			
15	10	1/4	13,5	8	25 x 15	17025015	60			
18	15	3/8	17,2	10	25 x 18	17025018	50	32 x 18	17032018	32
22	20	1/2	21,3	15	25 x 22	17025022	42	32 x 22	17032022	32
28	25	3/4	26,9	20	25 x 28	17025028	40	32 x 28	17032028	24
35	32	1	33,7	25	25 x 35	17025035	32	32 x 35	17032035	24
42	40	1 1/4	42,4	32	25 x 42	17025042	24	32 x 42	17032042	24
		1 1/2	48,3	40	25 x 48	17025048	24	32 x 48	17032048	18
54	50		54,0		25 x 54	17025054	22	32 x 54	17032054	18
57	50		57,0					32 x 57	17032057	16
		2	60,3	50	25 x 60	17025060	22	32 x 60	17032060	16
64			63,5		25 x 64	17025064	18	32 x 64	17032064	16
70			70,0		25 x 70	17025070	18	32 x 70	17032070	16
76,1	65	2 1/2	76,1	65	25 x 76	17025076	18	32 x 76	17032076	12
80								32 x 80	17032080	12
88,9	80	3	88,9	80	25 x 89	17025089	14	32 x 89	17032089	10
		3 1/2	101,6					32 x 102	17032102	10
108	100		108,0		25 x 108	17025108	10	32 x 108	17032108	8
114	100	4	114,3	100	25 x 114	17025114	10	32 x 114	17032114	8
133	125		133,0					32 x 133	17032133	6
		5	139,7	125	25 x 140	17025140	6	32 x 140	17032140	6
159	150		160,0					32 x 160	17032160	4

highly flame retardant ■ B₁-s3, d0

highly flame retardant ■ C₁-s3, d0



KAIFLEX ST-SK

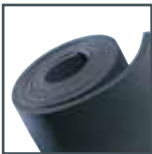
Self-adhesive tubes · Length: 2 m · Colour: Black

Copper pipes CU		Steel pipes FE			9 mm			13 mm		
External ø mm	Nominal width DN	Inches	External ø mm	Nominal width DN	Dimension	Article no.	m / box	Dimension	Article no.	m / box
15	10	¼	13,5	8	9 x 15	19909015	240	13 x 15	19913015	154
18	15	⅜	17,2	10	9 x 18	19909018	190	13 x 18	19913018	130
22	20	½	21,3	15	9 x 22	19909022	156	13 x 22	19913022	110
28	25	¾	26,9	20	9 x 28	19909028	124	13 x 28	19913028	86
35	32	1	33,7	25	9 x 35	19909035	92	13 x 35	19913035	76
42	40	1¼	42,4	32	9 x 42	19909042	70	13 x 42	19913042	56
		1½	48,3	40	9 x 48	19909048	60	13 x 48	19913048	48
54	50		54,0		9 x 54	19909054	60	13 x 54	19913054	46
		2	60,3	50	9 x 60	19909060	60	13 x 60	19913060	40
76,1	65	2½	76,1	65	9 x 76	19909076	54	13 x 76	19913076	34
88,9	80	3	88,9	80	9 x 89	19909089	36	13 x 89	19913089	30

highly flame retardant ■ B₁-s3, d0

Copper pipes CU		Steel pipes FE			19 mm				
External ø mm	Nominal width DN	Inches	External ø mm	Nominal width DN	Dimension	Article no.	m / box		
15	10	¼	13,5	8	19 x 15	19919015	86		
18	15	⅜	17,2	10	19 x 18	19919018	78		
22	20	½	21,3	15	19 x 22	19919022	74		
28	25	¾	26,9	20	19 x 28	19919028	58		
35	32	1	33,7	25	19 x 35	19919035	48		
42	40	1¼	42,4	32	19 x 42	19919042	40		
		1½	48,3	40	19 x 48	19919048	30		
54	50		54,0		19 x 54	19919054	30		
		2	60,3	50	19 x 60	19919060	28		
76,1	65	2½	76,1	65	19 x 76	19919076	28		
88,9	80	3	88,9	80	19 x 89	19919089	22		

highly flame retardant ■ B₁-s3, d0

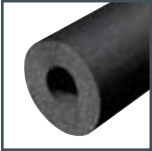




KAIFLEX ST / ST-SK

Sheets · Self-adhesive Sheets · Colour: Black

Thickness mm	Sheet in Rolls (1 m width)			Self-adhesive Sheet in Rolls (1 m width)		
	Dimension	Article no.	m ² / box	Dimension	Article no.	m ² / box
3	PL03-R	18003000	30	PL03-R/SK	18203000	30
6	PL06-R	18006000	30	PL06-R/SK	18206000	30
10	PL10-R	18010000	20	PL10-R/SK	18210000	20
13	PL13-R	18013000	14	PL13-R/SK	18213000	14
16	PL16-R	18016000	12	PL16-R/SK	18216000	12
19	PL19-R	18019000	10	PL19-R/SK	18219000	10
25	PL25-R	18025000	8	PL25-R/SK	18225000	8
32	PL32-R	18032000	6	PL32-R/SK	18232000	6
40	PL40-R	18040008	8	PL40-R/SK	18740000	8
50	PL50 (2,0 x 1,0 m)	18150210	6	PL50/SK (2,0 x 1,0 m)	18350210	6

highly flame retardant ■ B-s3, d0



TECHNICAL DATA										
Material	Highly flexible, closed-cell insulation, FEF (Flexible Elastomeric Foam)									
Description	Highly flexible, closed-cell insulation material defined by extremely high moisture resistance factor and extremely low thermal conductivity.									
Application	Condensation prevention and energy loss limitation where piping (including elbows, filters), ducting, chillers and air conditioning equipment are concerned.									
Area of application (limit temperature)	Max. medium temperature	+105 °C	(sheets + 85 °C)			Please contact our Technical Service Department where temperatures exceed – 50 °C.				
	Min. medium temperature	– 50 °C	(– 200 °C)							
Thermal conductivity DIN EN ISO 8497 / DIN EN 12667	Medium temperature °C		–30	–20	0	+10	+20	+40	+70	
	Thermal conductivity W/(m•K)		0,031	0,032	0,034	0,035	0,036	0,038	0,041	
Water vapour resistance factor DIN EN 13469 / DIN EN 12086 Diffusion resistance coefficient	≥ 10.000 μ									
Fire rating according DIN EN 13501-1	Tubes: highly flame retardant - B _L -s3, d0, ≤ 25 mm thickness Sheets: highly flame retardant - B-s3, d0, 10 mm to 32 mm thickness Self extinguishing, doesn't propagate fire and produces no burning droplets in a fire situation.									
Fire rating national	CH:	VKF Brandkennziffer			5.2 schwerbrennbar, nicht tropfend					
	A:	ÖNORM B 3800 Teil 1 (fremdüberwacht)			B1 schwerbrennbar, Tr1 nichttropfend, Q2 normalqualmend					
Further Certification	UL-approved (UL94) FM-approved DNV, Lloyd's Register, See BG									
Fire performance surface spread of flame, BS476 Part 7 1997	Class 1									
Fire propagation BS476 Part 6 1989	Class 0									
Total Index of Performance Sub Index										
Resistance to chemicals	Consult product test list									
Corrosion prevention	complies to DIN 1988 part 7									
AGI insulation reference number	Tubes:	36.12.01.06.04								
	Sheets:	36.01.01.02.04								
Warehousing	self-adhesive products: 1 year									
Manufacturing process	without CFC, HFCKW, formaldehyde, cadmium									
Note on the technical data:	All values are based on results obtained under typical conditions of use. In his own interests the recipient of these values should check with us beforehand that the values figures are in fact correct for his intended application. Please contact our Technical Service Department for further information.									

DIMENSIONAL TOLERANCES ACCORDING DIN EN 14304:2010-03							
Form of delivery	Length	Width	Thickness		Squareness	Inside diameter	
			Declared	Tolerance		D _i ≤ 100	D _i > 100
Tubes	± 1,5 %		d ₀ ≤ 8 8 < d ₀ ≤ 18 18 < d ₀ ≤ 31 d ₀ > 31	± 1,0 ± 1,5 ± 2,5 ± 3,0	3,0 mm	D _{i,D} + 1 ≤ D _i ≤ D _{i,D} + 4	D _{i,D} + 1 ≤ D _i ≤ D _{i,D} + 6
Sheets	± 1,5 %	± 2,0 %	d ₀ ≤ 6 6 < d ₀ ≤ 19 d ₀ > 19	± 1,0 ± 1,5 ± 2,0	3,0 mm/m (length/width) – 3,0 mm (thickness)	–	–
Rolls	+ 5,0 % – 1,5 %	± 2,0 %	d ₀ ≤ 6 6 < d ₀ ≤ 19 d ₀ > 19	± 1,0 ± 1,5 ± 2,0	3,0 mm/m (length/width) – 3,0 mm (thickness)	–	–
Tapes	+ 5,0 % – 1,5 %	± 2,0 %	d ₀ = 3	– 0,1 + 1,5	–	–	–
Dimensions in millimetres ■ D _i = Internal diameter ■ d ₀ = Nominal thickness ■ D _{i,D} = nominal value of inner diameter (tubes)							



KAIFLEX ACCESSORIES

	Description	Article no.	Contents of tin	Contents of box
	Adhesive			
	KAIFLEX 414 adhesive · toluene-free · 220 g (paintbrush tin)	299-0.20	220 g	24
	KAIFLEX 414 adhesive · toluene-free · 450 g	299-0.45	450 g	20
	KAIFLEX 414 adhesive · toluene-free · 660 g	299-0.75	660 g	20
	KAIFLEX 414 adhesive · toluene-free · 2.200 g	299-2.50	2.200 g	6
	KAIFLEX 494 adhesive · LEED-compliant · 2.300 g	299-2300	2.300 g	6
	Cleaner			
	Special Cleaner	299REINI	1.0 l	12
	Protective Coating			
	KAIFLEX KAIFINISH Protective Coating · pure white RAL 9010	299KAFI1	0.75 l	12
	KAIFLEX KAIFINISH Protective Coating · grey RAL 7035	299KAFI5	0.75 l	12

	Description	Article no.	PU
	Gluepump		
	Gluepump · (long neck) + 17 mm paintbrush	299KABI4	1
	Gluepump · (short neck) + 17 mm paintbrush	299KABI1	1
	Paintbrush 11 mm	299KABI2	1
	Paintbrush 17 mm	299KABI3	1
	Knives		
	Ceramic Cutter · Cutter with ceramic blade (12 cm) and plastic handle (12 cm)	299SMES6	1
	Mat Cutter	299SMES3	1
	KAIFLEX-set of knives · 3 knives, 1 grinding stone	299SMES5	1
	Box Cutter · (Complete knife with 5 spare blades)	299SMES1	1
	Spare blades	299KLING	10
	45° knife	299SMES2	1
	Spare blades	299KLIFU	5

	Description	Article no.	Length m	Width mm	Thick-ness mm	Rolls / box
	Tape · self-adhesive					
	ST Tape · self-adhesive	1891BAND	15	50	3	12

Only full packaging units can be delivered.

Delivery of short lengths of tubes: Up to 10 % of the contents of a box can be delivered in 1 metre lengths. If a box contains less than 20 metres, a 2 metre tube can be replaced by two 1 metre tubes.

Delivery of short lengths of sheeting: One square metre of sheeting can be replaced by two 0,5 square metre sheets.

The pipe dimensions given in the tables refer to DIN EN 1057 for copper pipes and DIN EN 10255 for steel pipes.

In the event of a discrepancy between the information of non-German document and the German document, the German version shall prevail.



KAIMANN and the world of KAIFLEX products!

Established in 1959 KAIMANN GmbH are at the forefront of foam technology in Europe, our speciality is our involvement in the production of flexible closed cell elastomeric Nitrile Rubber insulation produced at our state of the art production facility in Hovelhof, Germany.

Our focus is on continuously high quality products and a second to none customer service.

If you would like further information please contact any of our customer service team at our address on the back page.



KAIMANN International

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KAIMANN GmbH
Germany

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kaiflex®
TECHNISCHE ISOLIERUNG
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ISOLATION TECHNIQUE

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