

# DALFRATEX®

### High temperature fibres and textiles

Dalfratex is a range of inorganic fibres and textiles. The materials are capable of operating continuously at 1000 °C and upto 1600 °C for limited periods.

Dalfratex products are available in unfired or fired conditions.

The code "U" defines the products which are unfired.

The two main coatings used are "D" and "AR" finishes. These coatings aid handleability (D) and abrasion resistance (AR).

Technical data		
<b>Classification temperature</b>	°C	1000 °C
<b>Shrinkage</b>		
200 °C - 24h	%	4
800 °C - 24h	%	7
1000 °C - 24h	%	12
1000 °C - 24h (pre-shrunk)	%	< 2
<b>Specific heat capacity</b>	kJ/kg K	0.88
<b>Chemical analysis</b>		
SiO <sub>2</sub>	%	98.57
Al <sub>2</sub> O <sub>3</sub>	%	0.47
TiO <sub>2</sub>	%	0.30
Alkalies	%	0.13
Fe <sub>2</sub> O <sub>3</sub>	%	0.08
MgO	%	0.07
B <sub>2</sub> O <sub>3</sub>	%	0.06
CaO	%	0.05
Chlorides	ppm	100-150

### Properties & advantages

- Good electrical insulator
- High electric strength
- Low electrical conductivity
- Compatible with mineral acids (except phosphoric and hydrofluoric)
- Compatible with a wide range of substances (air, chloride, carbon monoxide, ammonia and sulphur dioxide)
- Compatible with silica refractories at high temperatures
- Low chloride content
- Lightweight
- High resistance to thermal shock

### Application areas

#### AEROSPACE

- Gas turbine and rocket engines

#### HEAVY INDUSTRY

- Metallurgical/Steel production
- Glass manufacture
- Fire protection
- Electrical heating

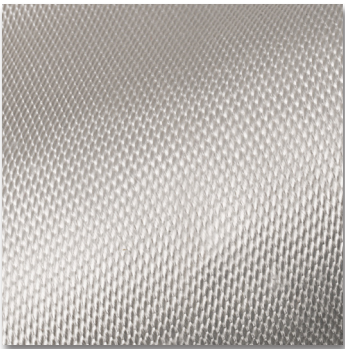
#### OIL AND GAS

- Pipeline and vessel fabrication
- Gas production

#### ENERGY

- Nuclear power
- Electrical generation

### DALFRATEX®



#### Delivery sizes DALFRATEX® cloth

Code		C-H	C-19	UC-H/D	UC-19/D	UC-19/AR
Basic form		pre-shrunk	pre-shrunk	unfired	unfired	unfired
Yarn type		plain				
Type of weave		satin				
Thickness	mm	0.9	1.6	0.9	1.6	1.7
Width	mm	825	825	910	910	910
Weight	g/m <sup>2</sup>	630	1250	640	1260	1300
Length	m	45	45	48	48	48

#### Product codes DALFRATEX® cloth

U	unfired
C	without the U prefix defines fired cloth
H	lightweight cloth
19	heavyweight cloth
D	coating to aid handleability
AR	coating to aid abrasion resistance (orange in colour)

**For example:** UC-19/AR is unfired heavyweight cloth with abrasion resistance  
C-H is fired lightweight cloth with no coating

Sold in linear metres with a nominal roll length of 45 m for fired and 48 m for unfired.



#### Delivery sizes DALFRATEX® cord

Code		D-T1	D-T20	D-T2	D-T3	D-T4
Diameter	mm	0.7	0.9	1.2	2	3
Weight	g/m <sup>2</sup>	430	740	1200	4000	6200
Package		2320 m/kg	1360 m/kg	840 m/kg	100 m	50 m

All cord can be supplied in pre-shrunk or in natural condition and are coated.

#### Product codes DALFRATEX® cord

D	cord
T	twisted
B	braided

### DALFRATEX®



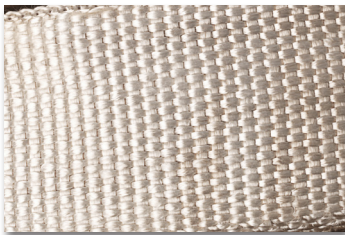
#### Delivery sizes DALFRATEX® rope

Code		R-B3	R-B4	R-C10	R-C13	R-C25	R-C40
Diameter	mm	9	12	10	13	20-25	40
Weight	g/m <sup>2</sup>	70	110	40	60	60	260
Length	m	50	25	25	25	25	25

The "B" series ropes are supplied in pre-shrunk condition and have light coating applied to assist manufacture. The "C" series ropes are supplied pre-shrunk and without coating

#### Product codes DALFRATEX® rope

R	rope
B	tighter construction
C	loose construction
R-C	the number represents the diameter in mm for example: R-C10 is a rope of loose construction 10 mm diameter
R-B	the number represents and 8 <sup>th</sup> of an inch for example: R-B3 = 3/8 <sup>th</sup> of an inch (9 mm)



#### Delivery sizes DALFRATEX® tape

Code		T-3	T-5	T-85	T-H725	T-H/50
Thickness	mm	0.4	0.4	4.0	1.0	1.0
Width	mm	20	30	22	25	50
Weight	g/m	6	9	37	16	32
Length	m	30	30	-	-	-

#### Product codes DALFRATEX® tape

T	tape
U	before code shows unfired product

Sold in linear metres. T-3 to T-105 are standard tapes with the code increasing with thickness and width. UT tapes are unfired, 124 is a code reference (type of construction) where the second two digits represent the width of the tape.

**For example:** UT-124/50 is 50 mm wide

Self adhesive tapes are made from the DALFRATEX® cloth - hence the codes H and 19. The second two digits represent the width.

**For example:** T-H/25 is self adhesive tape made from lightweight cloth 25 mm thick.

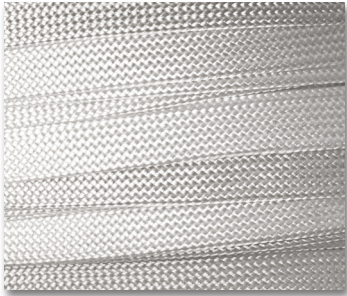
New tape codes for the 'thick tape' series shows:

Codes T = tape

Number = thickness x width

**For example:** T-622 is 6 mm thick x 22 mm wide (nominal)

### DALFRATEX®



Delivery sizes DALFRATEX® sleeving											
Code		S-R4	S-R6	S-R25	S-R32	S-F16	S-F20	S-F25	S-F30	S-63	S-8
Bore	mm	3.2	4.8	20	25	10	13	20	25		30
Wall thickness	mm	0.5	0.5	1.0	1.0	0.4	0.5	0.5	0.5		1.0
Length	m	100	60	15	100	300	300	300	300		50

All sleeveings can be supplied in pre-shrunk or in natural condition; with or without a coating

Product codes DALFRATEX® sleeving	
S	sleeving
DR	double wall sleeving

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