EXTREME TEMPERATURES Technical Data Sheet

INSULTHERM[™]

Insultherm

Dut-Ilnc

UL Recognized

- Resin Coated, Heavy Weight Fiberglass Won't Burn, Melt Or Become Brittle
- Easy To Install-Cuts With Scissors
- Resists Gasoline And Engine Chemicals
- Cut And Abrasion Resistant



Material

Resin Coated Fiberglass

Grad	e
FGN	

Wall Thickness Refer to Chart

Drawing Number TF001INS-WD



www.techflex.com 800.323.5140 • 973.300.9242 • fax: 973.300.9409 29 Brookfield Dr • Sparta, NJ 07871

					Put-t	h2 -			
Nominal Size	Part #	Maximum Diameter	Wall Thickness	Bulk Spool	Shop Spool	Retail	Clam	Available Colors	Lbs/ 100'
1/4″	FGN0.25	3/8″	0.031″	200′	50′	50′	6′	2	2.00
3/8″	FGN0.38	5/8″	0.043″	200′	50′	35′	6′	2	3.30
1/2″	FGN0.50	3/4″	0.046″	200′	50′	25′	6′	2	4.80
5/8″	FGN0.63	7/8″	0.046″	200′	50′	20′	6′	2	5.30
3/4″	FGN0.75	1 1/8″	0.046″	200′	50′	15′	6′	2	6.40
7/8″	FGN0.88	1 1/4″	0.046″	200′	50′	12′	6′	2	8.70
1″	FGN1.00	1 5/8″	0.057″	100′	25′	12′	6′	2	10.50
1 1/2″	FGN1.50	2 5/8″	0.061″	100′	25′	10′	6′	2	16.00

Resin Coated Fiberglass Protects To 1,200°F

INSULTHERM (FG) is an extremely high temperature resistant sleeve commonly used as thermal protection for wires, cables and hoses that are subjected to continuous and extreme high temperature environments, such as engine manifolds and exhaust systems.

FG is braided from fiberglass yarns and coated with high temperature resins. FG is tough and durable, maintaining its tight structure under extreme vibration, abrasion, mechanical stress and temperature variations.

FG installs easily over a variety of applications to either deflect or retain heat in environments up to 1,200° F.

"...will withstand extreme heat... provides the protection needed"

Peter Mercier - Engineer Team Bucknum Racing www.bucknum.com

Colors Available:

			1.01	
	63	SC 88	AN/	- DAMANG
8.65	63		0.40	A STATE
36	ę,	10.69	11.1.7	N/WAV
Ser		1.55	1.1.1	WINN.
25		1.73.0		AN INT

Black (BK) and Silver (SV).

Colors Available: 2 = BK and SV.





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Abrasion Resistance High

Abrasion Test Machine Taber 5150

Abrasion Test Wheel
Calibrase H-18

Abrasion Test Load
500g

Room Temperature 73°F

Humidity 55%

Visible Minor Scuffing 200 Test Cycles

Scuffing And Wear Continues **300 Test Cycles**

Scuffing And Wear Continues **500 Test Cycles**

Several Broken Strands 1,300 Test Cycles

Material Destroyed
1,650 Test Cycles

Pre-Test Weight
19,411.6 mg

Post-Test Weight 17,154.5 mg

Test End Loss Of Mass Point Of Destruction **2,257.1 mg**



Rating_____VW-1

Chemical Resistance

1=No Effect 4=More Affected 2=Little Effect 5=Severely Affected

3=Affected	
Aromatic Solvents	1
Aliphatic Solvents	1
Chlorinated Solvents	1
Weak Bases	1
Salts	1
Strong Bases	1
Salt Water 0-S-1926	1
Hydraulic Fluid <i>MIL-H-5606</i>	1
Lube Oil MIL-L-7808	1
De-Icing Fluid <i>MIL-A-8243</i>	1
Strong Acids	2
Strong Oxidants	2
Esters/Keytones	1
UV Light	2
Petroleum	1
Fungus ASTM G-21	1
Halogen Free	Yes
RoHS	Yes
SVHC	None

Melt Point ASTM D-2117 2,048°F (1,120°C)

Maximum Continuous Mil-I-23053 1,202°F (650°C)

Minimum Continuous -94°F (-70°C)

PROPERTIES

Monofilament Diameter ASTM D-204	NA
Flammability Rating	VW-1
Recommended Cutting_	Scissor
Colors	2
Wall Thickness	.031061
Tensile Strength (Yarn) ASTM D-2256 Lbs	
Specific Gravity ASTM D-	<i>-792</i> 1.0-1.8
Moisture Absorption % ASTM D-570	01
Hard Vacuum Data ASTM	E-595 at 10-5 torr
TML	.02
CVCM	.01
WVR	
Smoke D-Max ASTM E-662	
Outgassing	Low
Oxygen Index ASTM D-2863	

TEMPERATURES

ERATING

dO

025

1850

117.52

1100

8257

275

275

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