

**INSULTHERM®**  
**RESIN COATED FIBERGLASS · PROTECTS UP TO 1,200°F**  
**IT WILL NOT BURN, MELT OR BECOME BRITTLE**

INSULTHERM® (FGN) 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. Insultherm® is braided from fiberglass yarns and coated with high temperature resins. Insultherm® is tough and durable, maintaining its tight structure under extreme vibration, abrasion, mechanical stress and temperature variations. Insultherm® installs easily over a variety of applications to either deflect or retain heat in environments up to 1,200°F.

**SIZING CHART**

Nominal Size	Part #	Maximum Diameter	Wall Thickness	*Put-Ups		Available Colors	Lbs/100'
				M	L		
¼"	FGN0.25	⅜"	.031"	50'	200'	2	2.00
⅜"	FGN0.38	⅝"	.043"	50'	200'	2	3.30
½"	FGN0.50	¾"	.046"	50'	200'	2	4.80
⅝"	FGN0.63	⅞"	.046"	50'	200'	2	5.30
¾"	FGN0.75	1⅛"	.046"	50'	200'	2	6.40
⅞"	FGN0.88	1¼"	.046"	50'	200'	2	8.70
1"	FGN1.00	1⅝"	.057"	25'	100'	2	10.50
1½"	FGN1.50	2⅝"	.061"	25'	100'	2	16.00
2½"	FGN2.50	4⅛"	.071"	25'	100'	2	19.70

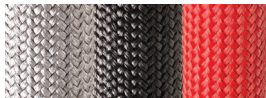
\*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



**FEATURES**

Material	Resin Coated Fiberglass
Grade	FGN
Wall Thickness	Refer To Chart
Drawing Number	TF001FGN-WD
Cutting	Scissors

**COLORS**



Silver (SV), Black (BK), \*Red (RD)

\*Red is available for special order

**CERTIFICATIONS**



## ABRASION

Abrasion Resistance	<b>HIGH</b>
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 & 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

## PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	NA
Flammability Rating	VW-1
Recommended Cutting	Scissors
Colors	3
Wall Thickness	.031"-.061"
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	NA
Specific Gravity (ASTM D-792)	1.0-1.8
Moisture Absorption % (ASTM D-570)	.01
Hard Vacuum Data (ASTM E-595 at 10-5 torr)	NA
TML	.02
CVCM	.01
WVR	.00
Smoke D-Max (ASTM E-662)	NA
Outgassing	Low
Oxygen Index (ASTM D-2863)	NA

## FLAMMABILITY

Rating	VW-1
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## OPERATING TEMPERATURES

Melt Point (ASTM D-2117)	2,048°F / 1,120°C
Maximum Continuous (Mil-I-23053)	1,202°F / 650°C
Minimum Continuous (Mil-I-23053)	-94°F / -70°C

## CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	1
Aliphatic Solvents	1
Chlorinated Solvents	1
Weak Bases	1
Salts	1
Strong Bases	1
Salt Water (O-S-1926)	1
Hydraulic Fluid (MIL-H-5606)	1
Lube Oil (MIL-L-7808)	1
De-Icing Fluid (MIL-A-8243)	1
Strong Acids	2
Strong Oxidants	2
Esters/Ketones	1
UV Light	2
Petroleum	1
Fungus (ASTM G-21)	1
Halogen Free	Yes
RoHS	Yes
SVHC	None