# THERMA SHIELD

### HIGH TEMPERATURE Technical Data Sheet

### THERMASHIELD<sup>®</sup> FLAT REFLECTIVE ALUMINIZED SURFACE BONDED TO INSULATING FIBERGLASS REFLECTS RADIANT HEAT

THERMASHIELD<sup>®</sup> creates a buffer between your wires, hoses and cables and the high temperature environments they are required to perform in. ThermaShield<sup>®</sup> is engineered by laminating an aluminum heat shield to a layer of strong fiberglass insulation. This system provides superior protection from radiant heat by reflecting it away from sensitive electronics, wiring and hoses. THERMASHIELD<sup>®</sup> FLAT (TSN) protects surfaces exposed to extreme heat with TSN. An aluminum laminated fiberglass sheet with a full coating of permanent, high temperature adhesive, applies directly to any clean surface. Ideal solution for protecting delicate electronic component boxes mounted close to engines or other heat sources. When applied, the aluminum laminate reflects heat away and the insulating fiberglass backing protects the fragile contents from thermal damage and failure.

### **SIZING CHART**

Nominal	Part #	Bart # Wall Thickness		Put-Ups		Kgs/
Size	Fall #	±0,15mm	Μ	L	Colors	100m
25,4mm	TSN1.00SV	0,6mm	30,5m	76,2m	1	2,38
38,1mm	TSN1.50SV	0,6mm	30,5m	76,2m	1	2,98
50,8mm	TSN2.00SV	0,6mm	30,5m	76,2m	1	4,09
76,2mm	TSN3.00SV	0,6mm	30,5m	76,2m	1	6,40
101,6mm	TSN4.00SV	0,6mm	30,5m	76,2m	1	8,33
127,0mm	TSN5.00SV	0,6mm	30,5m	76,2m	1	11,31
152,4mm	TSN6.00SV	0,6mm	15,2m	30,5m	1	13,69
174,6mm	TSN6.88SV	0,6mm	15,2m	30,5m	1	16,22

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



### **FEATURES**

Material	Aluminum Laminated Fiberglas
Grade	TSN
Wall Thickness	0,6mm
Drawing Number	TF001TSN-WD
Cutting	Scissors



### CERTIFICATIONS



FAR-25



## THERMA SHIELD

FLAT

#### ABRASION

Abrasion Resistance	VERY HIGH
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	70°F / 21°C
Humidity	57%
Foil Layer Worn Through	1 000 Test Cycles
Material Destroyed - Fiberglass Layer Worn Through	1 300 Test Cycles
Pre-Test Weight	1 804,3mg
Post-Test Weight	9 918,5mg
Test End Loss Of Mass Point Of Destruction	885,8mg

### **PHYSICAL PROPERTIES**

Monofilament Diameter (ASTM D-204)	NA
Flammability Rating	Non Combustible
Recommended Cutting	Scissors
Colors	1
Wall Thickness	0,6mm
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	NA
Specific Gravity (ASTM D-792)	NA
Moisture Absorption % (ASTM D-570)	NA
Hard Vacuum Data (ASTM E-595 at 10-5 torr)	NA
TML	NA
CVCM	NA
WVR	NA
Smoke D-Max (ASTM E-662)	NA
Outgassing	NA
Oxygen Index (ASTM D-2863)	NA

### **FLAMMABILITY**

on Combustible, Will Not Burn

### **OPERATING TEMPERATURES**

Melt Point (ASTM D-2117)	2 048°F / 1 120°C
Maximum Continuous (Mil-I-23053)	491°F / 255°C
Minimum Continuous	-76°F / -60°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 (0-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	1	
Petroleum	1	
Fungus (ASTM G-21)	1	
Halogen Free	Yes	
RoHS	Yes	
SVHC	NA	

