

# SAE AS1072 Aviation / Aerospace Firesleeve: High Temperature, Heat, Flame & Fire Resistant Type 2 with SAE Marking Silicone Rubber Composite

## 500°F / 260°C Continuous Rating – Higher Temperature for Shorter Periods



FlameShield™ Aviation / Aerospace grade firesleeve is manufactured to the SAE AS1072 specification. CofC and Test Report available with orders. Our company QMS has been reviewed and accepted by major aerospace OEMs. Allows properly assembled hose assemblies to meet SAE AS1055D testing. We also maintain traceability records for customers buying this product. 500°F / 260°C continuous rating and with a 15 minute FAA “Fireproof” rating when assembled according to SAE AS1055.

This sleeve is extremely flexible, pliable and conformable. Typically used to protect fuel, oil, hydraulic lines and hoses, as well as critical wiring and cables. Remains flexible to -76°C (-104.8°F).

Firesleeve must be cut slightly longer than the hose or cable it is covering so it covers part of the fitting or connector. The longer the hose or cable, and if tight fitting, or if in use the hose/cable will be curved, then the longer the firesleeve needs to be. Firesleeve that is short will pull back from the fitting when the hose is bent, and if this occurs the hose assembly won't meet the TSO. Appropriate clamps must be used over the firesleeve at the fitting for aviation and Marine applications. (See our clamps and tools)

This sleeve has a radial elasticity of approximately 15% allowing it to slide over connectors, fittings and splices.

For further specifications see Technical Data page 1-6. This sleeve is marked per the AS1072 specification. Other markings such as tradenames may be added.

FlameShield™ S-AS1072 firesleeve is also compliant to the following standards: UL 1441 VW-1, DIN EN ISO 15540, EN 45545, NF F 16-101, BS 6853, NF X 10-702, NF X 70 100 & NF X 70 200, BS EN ISO 11925, BS EN ISO 4589-2, BS EN 60695-2-11, ASTM D 2863 OI, DD CEN/TS 45545-2, ASTM G85 Type 2.

**500°F / 260°C continuous rating, 800°F / 426°C for periods up to 30 minutes  
2200°F / 1205°C for periods up to 15 minutes and short excursions to 3000°F / 1650°C.**

FlameShield™ SAE AS1072 Aviation / Aerospace Grade Firesleeve with Marking									
Nominal ID Inches / mm / Dash #			Part Number	Price per Foot / Metre	Nominal ID Inches / mm / Dash #			Part Number	Price per Foot / Metre
1/4	6	-04	AS1072-04 SIL-FG	\$ 3.99 / \$ 13.09	1 3/4	44	-28	AS1072-28 SIL-FG	\$ 13.88 / \$ 45.52
5/16	8	-05	AS1072-05 SIL-FG	\$ 4.17 / \$ 13.66	1 7/8	48	-30	AS1072-30 SIL-FG	\$ 16.19 / \$ 53.10
3/8	10	-06	AS1072-06 SIL-FG	\$ 4.34 / \$ 14.24	2	51	-32	AS1072-32 SIL-FG	\$ 19.28 / \$ 63.23
7/16	11	-07	AS1072-07 SIL-FG	\$ 4.88 / \$ 16.01	2 1/4	57	-36	AS1072-36 SIL-FG	\$ 22.18 / \$ 72.76
1/2	13	-08	AS1072-08 SIL-FG	\$ 5.16 / \$ 16.92	2 3/8	60	-38	AS1072-38 SIL-FG	\$ 23.63 / \$ 77.51
9/16	15	-09	AS1072-09 SIL-FG	\$ 5.44 / \$ 17.84	2 1/2	64	-40	AS1072-40 SIL-FG	\$ 25.07 / \$ 82.22
5/8	16	-10	AS1072-10 SIL-FG	\$ 5.71 / \$ 18.73	2 5/8	67	-42	AS1072-42 SIL-FG	\$ 28.36 / \$ 93.02
11/16	17	-11	AS1072-11 SIL-FG	\$ 6.11 / \$ 20.04	2 3/4	70	-44	AS1072-44 SIL-FG	\$ 29.04 / \$ 95.26
3/4	19	-12	AS1072-12 SIL-FG	\$ 6.51 / \$ 21.35	2 7/8	73	-46	AS1072-46 SIL-FG	\$ 33.01 / \$ 108.26
13/16	20	-13	AS1072-13 SIL-FG	\$ 7.11 / \$ 23.32	3	76	-48	AS1072-48 SIL-FG	\$ 34.98 / \$ 114.74
7/8	22	-14	AS1072-14 SIL-FG	\$ 7.69 / \$ 25.22	3 1/4	83	-52	AS1072-52 SIL-FG	\$ 35.54 / \$ 116.58
1	25	-16	AS1072-16 SIL-FG	\$ 8.70 / \$ 28.54	3 1/2	89	-56	AS1072-56 SIL-FG	\$ 37.94 / \$ 124.44
1 1/8	29	-18	AS1072-18 SIL-FG	\$ 9.55 / \$ 31.32	3 3/4	95	-60	AS1072-60 SIL-FG	\$ 38.76 / \$ 127.14
1 1/4	32	-20	AS1072-20 SIL-FG	\$ 10.48 / \$ 34.37	4	102	-64	AS1072-64 SIL-FG	\$ 40.19 / \$ 131.81
1 3/8	35	-22	AS1072-22 SIL-FG	\$ 11.33 / \$ 37.16	4 1/2	114	-72	AS1072-72 SIL-FG	\$ 46.14 / \$ 151.33
1 1/2	38	-24	AS1072-24 SIL-FG	\$ 12.18 / \$ 39.95	5	127	-80	AS1072-80 SIL-FG	\$ 50.58 / \$ 165.89
1 5/8	41	-26	AS1072-26 SIL-FG	\$ 13.03 / \$ 42.74	6	162	-96	AS1072-96 SIL-FG	\$ 60.69 / \$ 199.08

SAE AS1072 Aerospace grade firesleeve is fabricated from a dense E-type braided sleeve and then receives a thick coating of self-extinguishing silicone rubber that withstands flame exposure, allowing qualified hose assemblies to meet FAA TSO-C42 (Propeller feathering hose assemblies), TSO-C53a (Fuel and Oil system hose assemblies) and TSO-C75 (Hydraulic hose assemblies). Standard lengths are 100 feet; specific cut lengths are available. Standard color is Oxide-Red with black printing. Black sleeve with white printing is available. Other colors available.

**This product is available By-The-Foot / Metre or in standard 100 foot / 30 metre lengths  
Larger sizes available in 50 foot / 15 metre lengths**

## FlameShield™ Firesleeve Technical Data For Part Numbers S-FS / S-FSHD / S-AS1072 / S-ISO15540

### Base Fiberglass Substrate – All Versions

Fiber Type:	E Glass
Specific Gravity:	2.54-2.69
Breaking Tenacity:	1.71 gf/TEX. Std. 1.71 gf/TEX Wet
Tensile Strength:	450,000-500,000 psi.
Breaking Elongation:	4.81% Std. 4.81% Wet
Elastic Recovery:	100%
Average Stiffness:	2824.3 cn/TEX

Effect of Heat: Will not burn; Retains 75% tensile at 343°C; Softens at 732-877°C; Melts at 1121-1182°C.  
Effect of Acids and Alkalis; Resistance to acids is fair. Good resistance to most alkalis.  
Effect of Bleaches and Solvents: Unaffected.

### Silicone Rubber Coating – All Versions

Durometer, Shore A:	Initial; 35	Aged 240 hours @ 200°C; 45
Tensile Strength (psi):	Initial; 875	Aged 240 hours @ 200°C; 800
Elongation %:	Initial; 500	Aged 240 hours @ 200°C; 200
Flammability, UL94; V-1		
Dielectric Strength (volts/mil); 485		

### Elasticity

S-FSHD: Linear elasticity of approximately 2% and a radial elasticity of approximately 15%.  
S-FS: Linear elasticity of approximately 2% and a radial elasticity of approximately 2%.

### S-FSHD / S-AS1072 / S-ISO15540 sleeve meeting SAE AS1072 & DIN EN ISO15540 Specifications; Additional Data

#### Coating Thickness

AS1072 Specification: Minimum: .03" (0.8mm)

#### Fluid Resistance

Phosphate Ester hydraulic fluids	MIL-H-5606 hydraulic fluid
MIL-T-5624 Jet Fuel	MIL-L-6082 lubricating oil
MIL-L-7808 lubricating oil	MIL-L-23699 lubricating oil
MIL-H-83282 hydraulic fluid	

UL 1441 VW-1, EN 45545, NF F 16-101, BS 6853, NF X 10-702, NF X 70 100 & NF X 70 200, BS EN ISO 11925, BS EN ISO 4589-2, BS EN 60695-2-11, ASTM D 2863 OI, DD CEN/TS 45545-2, ASTM G85 Type 2.

### Printed/Marked Sleeve Options

FlameShield™ SAE AS1072 firesleeve is available unmarked but package labelled with the SAE nomenclature, or with SAE standard marking. Sleeve can also be printed/marked with other identification, part numbers, instructions, warnings, etc. Non standard SAE marking cost of an etched print wheel is \$275.00. A setup charge of \$75.00 per print run applies. Cost of printing is \$0.25 per foot. Standard SAE marking is \$0.20 per foot.

