TECHNICAL DATASHEET:
kSil™ V-0 Soft-Medium Flame Resistant Silicone Sponge

PRODUCT DESCRIPTION
Lightweight, closed cell silicone sponge.

TYPICAL APPLICATIONS
· Automotive
· Aerospace
· Electronics
· Heating and Ventilation (HVAC)
· Lighting
· Marine
· Military
· Rail

PRODUCT FEATURES & BENEFITS
· Flame resistant to UL94V0
· Smooth Skin – Excellent sealing capability to IP67
· Meets International Flame and Smoke Standards – NFPA 130 (US) & EN45545-2 (European)
· Low Outgassing Material – Low Smoke index and Low toxicity
· Super low compression set
· Low water absorption
· Weight saving

TECHNICAL DATA	VALUE	TEST METHOD / STANDARD
THICKNESS	1/8", 3/16", 1/4", 3/8", 1/2", 3/4", 1"	
COLOR	Gray (standard), Black	
CELL STRUCTURE	Closed Cell	
MATERIAL/SUBSTRATE	Silicone Sponge	
DENSITY	19.4 lbs/ft³	BSENISO 845, ASTM D3574
BRITTLE POINT	-80°C (-112°F)	ASTM D746
LIMITING OXYGEN INDEX	43.9%	ENO ISO 4589-2: OI
RADIATION RESISTANCE	$>10^5$ Grays (10^7 Rads) typical	
COMPRESSION STRESS 25% STRAIN	5.8 psi	ASTM D1056
COMPRESSION STRESS 40% STRAIN	13.1 psi	BSENISO 3386 part 1,2
TENSILE STRENGTH	44.1 psi	BSENISO 1798, ASTM D412
ELONGATION TO FAILURE	90%	BSENISO 1798, ASTM D412
COMPRESSION SET, 22 HOURS @ 158°F, 50%	<1%	BSENISO 1856
COMPRESSION SET, 22 HOURS @ 212°F, 50%	3%	ASTM D1056
THERMAL CONDUCTIVITY	0.099 W/m.K	DIN EN993-15
WATER ABSORPTION	<1%	ASTM D1056
LOW TEMPERATURE RESISTANCE	-76°F	
HIGH TEMPERATURE RESISTANCE	446°F	
INTERMITTENT TEMPERATURE RESISTANCE	482°F	
FAR 25 APPENDIX F SEC A 1 (i) & (ii) (MINIMUM)	1.5 mm	FAR 25 APP. F SEC A 1 (i)
FLAME SPREAD (CFE) kWm²	2 mm = 26.57 25 mm = 20.87	ISO 5658-2
SMOKE DENSITY (Ds MAX) 25 kWm²	3 mm = 18 25 mm = 31	EN ISO 5659-2
SMOKE/TOXICITY 50 kWm⁻²	Ds(4) 2 mm = 55	EN ISO 5659-2

Specifications are believed to be accurate at the time of publication and are subject to change without notice. It is the responsibility of the end-user to test and determine suitability of this material for a particular application. **REV. 0**

H-O PRODUCTS CORPORATION

TECHNICAL DATASHEET:
kSil™ V-0 Soft-Medium Flame Resistant Silicone Sponge

	VOF[4] min 25 mm = 57 2 mm = 159 CIT[g] 25 mm = 154 2mm = 0.03 25mm = 0.04	
CONE CALORIMETER 50 kWm⁻²	MARHE kWm² 2mm = 76.67 25mm = 68.14	ISO 5660-1
TOXICITY (CIT nlp) **600°C**	2mm = 0.02 25mm = 0.05	NF X 70-100-1 & 2
UL94 V0	1.5 mm	
EN45545-2 (HL3)	Pass	
NFPA 130	Pass	
BOMBARDIER – SMP 800c	Pass	
AIRBUS – ABD0031	Pass	
OZONE RESISTANT	Yes	
OXIDATION RESISTANT	Yes	
UV RESISTANT	Yes	
CORONA DISCARGE RESISTANT	Yes	
COSMIC RADIATION RESISTANT	Yes	
IONISING RADIATION RESISTANT	Yes	
WEATHER RESISTANT	Yes	
ASTM D1056 2D2	Pass	
FMVSS 302	Pass	
JAR 25 APPENDIX F SEC A 1 (i) & (ii)	Pass	
CS 25 APPENDIX F SEC A 1 (i) & (ii)	Pass	

FLAME RESISTANT – EN45545-2 Classifications:		
PROPERTY	**DESCRIPTION**	**RATING**
R1	Interior surfaces (& non-listed interior products <0.2m²) (2 mm – 25 mm thickness range)	HL2
R2	Limited surfaces (2 mm – 25 mm thickness range)	HL3
R3	Strips (2 mm – 25 mm thickness range)	HL3
R7	Gangway surfaces, ducting (& non-listed exterior products <0.2m²) (2 mm – 25 mm thickness range)	HL2
R8	Roof (external) (2 mm – 25 mm thickness range)	HL2
R17	Cab housing (2 mm – 25 mm thickness range)	HL2
R22	Interior seals (& non-listed interior products <0.2m²) (2 mm - 25 mm thickness range)	HL3
R23	Exterior Seals (& non-listed exterior products <0.2m²) (2 mm - 25 mm thickness range)	HL3