

DATA SHEET

HOT SHIELD WILDLAND FACE PROTECTOR MASK MODEL HS-2

DESCRIPTION: The Hot Shield Face Protector Mask Model HS-2 is face mask designed specifically for firefighters and other workers that are subject to direct flame, radiant heat, smoke and airborne particulate hazards in an outdoor environment and where use of a self-contained breathing apparatus is either impractical or impossible. The U.S. patented, unique layered design provides for thermal protection to face & neck areas and some measure of respiratory relief.

Thermal protection is accomplished by layers of CarbonX, an extremely durable & heat resistant proprietary fabric manufactured by Tex Tech Industries. CarbonX fabrics used in the HS-2 are individually tested to exceed the R.P.P (Radiant Protective Performance) requirements of NFPA #1977-2022. CarbonX also absorbs perspiration, adding to overall user comfort. The HS-2 is not a respirator but does provide a measure of respiratory relief via a layer of CarbonX knit mesh fabric which “screens” larger airborne particulate. Much of the smaller particulate that pass through the mesh are then captured by the disposable N-95 (or EN) respirator filter housed inside an integral filter “pocket”. One (1) activated carbon N-95 filter is included with each packaged HS-2 (with some exceptions for certain countries regulations which forbid the importation of N-95 filters). The HS-2 Mask can hang loosely around the neck/chest area until ready for use and then quickly donned & secured behind the neck with hook and loop fasteners (Velcro). This can be done quickly and easily without removal of gloves. 3M Scotchlite® reflective trim for nighttime visibility is sewn to either side. The HS-2 can be classified as an “interface” component.

KEY FEATURES

- ★ Patented Design
- ★ CarbonX materials inside and out
- ★ Designed by firefighters for wildland firefighting operations
- ★ Moderately easy to breathe through...designed for intermittent use as needed
- ★ Filter pocket allows insertion of low-level, N-95 or EN respirator filter with exhalation valve
- ★ Very lightweight....only 5.8 oz / 162.4 grams
- ★ Comfortable and absorbs perspiration
- ★ Hangs loose around your neck until you need it (integral CarbonX hang strap)
- ★ 3M Reflective Trim for nighttime visibility



HS-2 SPECIFICATIONS

Name:	Hot Shield Firefighter Face Mask
Model Number:	HS-2
Weight:	5.8oz / 162.4 grams
Wt w/Filter Installed:	6.5oz / 182 grams
Sizing:	One size fits all (hook & loop fasteners behind neck)
Limitations:	Will not block gases, vapors or significant or fine airborne particulate. Not a respirator
Coverage:	Most areas of the face and neck. Leaves ears exposed.

Product Testing:	Mask itself subjectively tested only. CarbonX fabrics have been independently tested. Tests include RPP (Radiant Protective Performance) ASTM F1939, the TPP(Thermal Protective Performance) ISO 17492, the Flame Resistance (Vertical Flame Test) ASTM D6413, the Cleaning/Shrinkage Resistance Test AA135, and the Seam Breaking Test ASTM 1683.
Care:	Hand wash only with mild soap, air dry. No machine wash or dry.
Warranty:	One year materials and workmanship
Filter Info:	Supplied with (depending on country) with one (1) activated carbon disposable (N-95) filter with Exhalation Valve

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FABRIC COMPONENT LIST and TESTING DATA FOR CARBON X FABRICS

CarbonX / Hot Shield USA Components List - Model HS-2				
				
Item #	Model #	CarbonX Fabric	Location on Mask	Fabric Oz. Weight
1	HS-2	CK-3 (Rip-Stop Weave)	Outward facing panels	7.5 oz
1	HS-2	C-59 (Plain Weave)	Inner panels, Velcro Strap/leash, Clip Pockets, Head-Strap Panels	5.9 oz.
1	HS-2	NSM 18-19 (Rib Knit)	Breathing Port	18.5 oz.
1	HS-2	DJ-77 (Interlock Knit)	Nose Clip Encasement / Filter Encasement	7.75 oz.

CARBONX TESTING DATA				
Test Name	Standard	NFPA 1977 (2011) Requirement	Fabric: CarbonX RST-75	Fabric: CarbonX C-59
Radiant Protective Performance (RPP)	ASTM F1939	7 cal/cm ² or greater	Combination: 11.1 cal/cm ²	Combination: 11.1 cal/cm ²
Thermal Protective Performance (TPP)	ISO 17492	NFPA 2112: 3.0 cal/cm ² (spaced TPP of 6.0 cal/cm ²)	Single layer: 9.7 cal/cm ²	Single layer: 10.2 cal/cm ²
Flame Resistance (Vertical Flame Test)	ASTM D6413	4" or less of char length; 2.0 seconds or less of after flame; no melt no drip	Pass (0, 0, 0)	Pass (1", 0, 0)
Heat Shrink Resistance	None referenced	Less than 10% in any direction	Pass (-4.3%, -1.5%)	Pass (-3.4%, -1.6%)
Cleaning/Shrinkage Resistance	AATC 135, Machine Cycle I, Wash Temp IV, Drying Aiii	Shrinkage less than 5%	Pass (-3.8%, -2.9%)	Pass (-3.1%, -1.5%)
Seam Breaking Test	ASTM 1683	No minimum	51.5 / 47.3 lbf	66.18 / 53.8 lbf