

## Hexcel® HexForce™ 386 Aramid Fabric

Category : Other Engineering Material , Composite Fibers , Polymer , Thermoset , Aramid

**Material Notes:**

Hexcel manufactures aramid fabrics for use in aerospace applications as well as marine, tooling and recreational products where high strength, low weight, and impact resistance are essential. Aramids display excellent dimensional stability with a slightly negative coefficient of thermal expansion ( $-2.4 \times 10^{-6}/^{\circ}\text{C}$ .) They are resistant to chemicals with the exception of a few strong acids and alkalis. Aramids have excellent stability over a wide range of temperatures for prolonged periods. They show essentially no embrittlement or strength loss at temperatures as low as  $-320^{\circ}\text{F}$  ( $-196^{\circ}\text{C}$ ). Aramids do not melt or support combustion but will start to carbonize at approximately  $800^{\circ}\text{F}$  ( $427^{\circ}\text{C}$ ). Information provided by Hexcel

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Hexcel-HexForce-386-Aramid-Fabric.php](http://www.lookpolymers.com/polymer_Hexcel-HexForce-386-Aramid-Fabric.php)

Physical Properties	Metric	English	Comments
Thickness	635 microns	25.0 mil	
Fiber Count	2400 dtex	2160 denier	Warp yarn; Kevlar® 49
	2400 dtex	2160 denier	Fill yarn; Kevlar® 49

Mechanical Properties	Metric	English	Comments
Tensile Impact	786.4 J/cm	1473 ft-lb/in	Filling
	974.9 J/cm	1826 ft-lb/in	Warp

Thermal Properties	Metric	English	Comments
CTE, linear	$-2.40 \mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	$-1.33 \mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
Maximum Service Temperature, Air	$427^{\circ}\text{C}$	$801^{\circ}\text{F}$	starts to carbonize
Minimum Service Temperature, Air	$-196^{\circ}\text{C}$	$-321^{\circ}\text{F}$	

Descriptive Properties	Value	Comments
Fabric Weight (oz/yd <sup>2</sup> )	13.6	Dry
Nominal Construction (count/in)	22	Fill
	27	Warp
Weave Style	4x4 Basket	

**Contact Songhan Plastic Technology Co.,Ltd.**

**Website : [www.lookpolymers.com](http://www.lookpolymers.com)**

**Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)**

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

**Address : United North Road 215,Fengxian District, Shanghai City,China**