



POLYONICS

ITW THERMAL FILMS  
**EXTREME**  
SOLUTIONS

# LABEL RIBBON COMBINATION SOLUTIONS FOR HALOGEN FREE, FIRE RETARDANT ELECTRONICS LABELING

ITW THERMAL FILMS B324 DURABLE EXTREME SERIES RESIN™ RIBBON  
AND POLYONICS XF-603 AND XF-604 FLAMEGARD™ LABELS

## Polyonics Halogen Free, Flame Retardant Label Materials

Product Number	Description	Certifications	Applications/Markets
FLAMEGARD™ XF-603	A 1 mil polyimide with a white printable coating and high temperature acrylic adhesive. This material has been designed to prevent flame propagation and has excellent chemical and thermal resistance.	<ul style="list-style-type: none"> <li>• UL94, VTM-0</li> <li>• UL 969</li> <li>• Halogen Free</li> <li>• REACH</li> <li>• RoHS</li> </ul>	<ul style="list-style-type: none"> <li>• Battery labels</li> <li>• Electronic insulation labels</li> <li>• Product identification</li> <li>• Warranty labels</li> <li>• Wire and cable marking (Avionics)</li> <li>• Power cable identification</li> <li>• Component labeling</li> </ul>
FLAMEGARD™ XF-604	A 2 mil polyester, this unique material utilizes a top coated polyethylene terephthalate film and adhesive combination to provide the flame retardant properties.	<ul style="list-style-type: none"> <li>• UL94, VTM-1</li> <li>• UL 969</li> <li>• Halogen Free</li> <li>• REACH</li> <li>• RoHS</li> </ul>	<ul style="list-style-type: none"> <li>• Battery labels</li> <li>• Power supplies</li> <li>• Automotive, under the hood labels</li> <li>• Product identification</li> <li>• Asset-tracking</li> <li>• Tracking labels for mobile hand held devices</li> </ul>



## ITW Thermal Films Extreme Series Resin™ Ribbon

Resin Ribbon	Description	Certifications
B324	Halogen free, multi-purpose black resin designed for demanding applications. B324 is formulated with ITW Thermal Films' proprietary anti-static coating and high sensitivity inks that enable you to maintain and sustain the life of your printheads.	<ul style="list-style-type: none"> <li>• UL® recognized with XF-603 and XF-604</li> <li>• REACH</li> <li>• RoHS</li> <li>• WEEE</li> <li>• ISEGA</li> </ul>

[Click here](#)  
to watch a video  
on flame retardant  
label materials.



These products are halogen free.

These results are regarded as a general guide to material properties and ribbon/label selection. Results are representative of optimized printing conditions, and should not replace customer testing and validation of the ribbon/label combination. Since the actual conditions under which the materials may be used are beyond our control, no warranty of any kind, expressed or implied, concerning the Extreme Solutions™ ribbon/label selection is made by ITW Thermal Films and/or Polyonics.

## EXTREME ENVIRONMENTS DEMAND DURABLE LABEL AND RIBBON SOLUTIONS

To learn more about ITW Thermal Films B324 Extreme Series Resin™ ribbon, call 1-877-887-3456, e-mail: [info@itwthermalfilms.com](mailto:info@itwthermalfilms.com), or visit [www.itwextremesolutions.com](http://www.itwextremesolutions.com).

To learn more about Polyonics Flamegard™ XF-603 and XF-604 labels, call 1-603-352-1415, e-mail: [info@polyonics.com](mailto:info@polyonics.com), or visit [www.polyonics.com](http://www.polyonics.com).

