



# DuPont™ Kapton® XP

## Insulation Substrate

### General Description

Kapton® type XP provides a type H film coated on one or both sides with a proprietary fluorocarbon resin which provides excellent mechanical strength and adhesive properties at elevated temperatures.

In addition, high level bond strengths of XP to copper, itself or other materials are maintained at elevated temperatures. The four graphs included with this bulletin compare retention of bond strength of type FN and type XP from room temperature to 200°C.

Kapton® XP exhibits the same chemical stability, electrical properties, and mechanical strengths in high and low temperature environments as has been demonstrated with Kapton® FN.

### Availability

Both 2 mil Kapton® XP (919) and 1.5 mil XP (019) are in inventory. Other constructions can be made available as market applications and needs develop.

Substrate preparation and electrical, mechanical and chemical data can be found in the Kapton® Summary of Properties booklet (EI-10142).

Property	Unit	150XP019	200XP919	Test Method
Thickness	mil	1.5	2.0	ASTM D374
	µm	38	50	
Tensile Strength	kpsi	29	24	ASTM D882
	MPa	200	165	
Elongation	%	93	95	ASTM D882
Dielectric Strength	V/mil	4400	4800	ASTM D149
	kV/mm	173	189	
Yield	ft <sup>2</sup> /lb	82.4	57.4	-
	m <sup>2</sup> /kg	16.9	11.8	

# DuPont™ Kapton® XP

Insulation Substrate

Figure 1. Kapton® XP vs. Kapton® FN

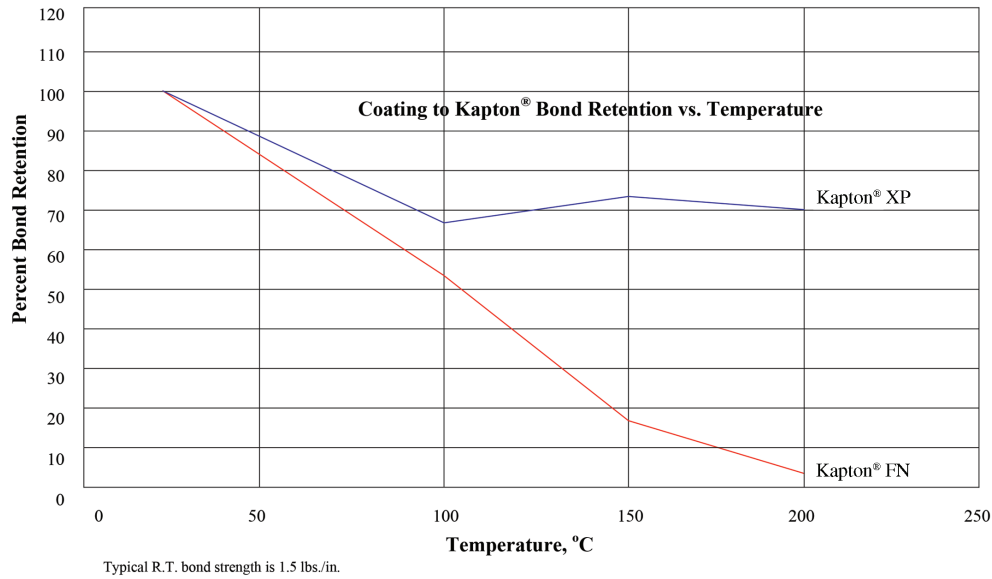
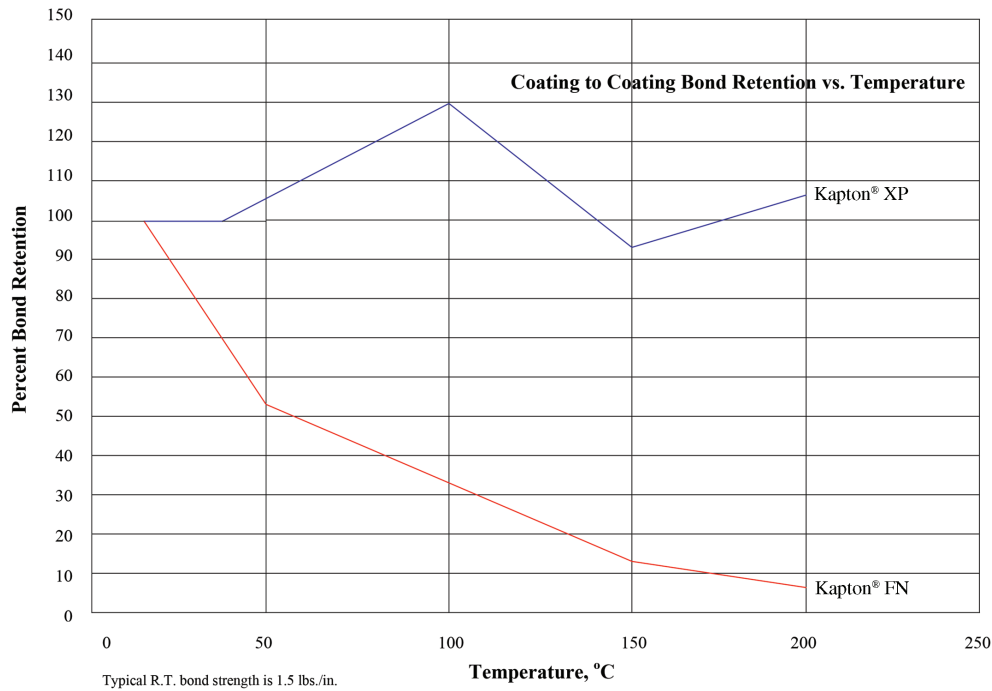


Figure 2. Kapton® XP vs. Kapton® FN



# DuPont™ Kapton® XP

Insulation Substrate

Figure 3. Kapton® XP vs. Kapton® FN

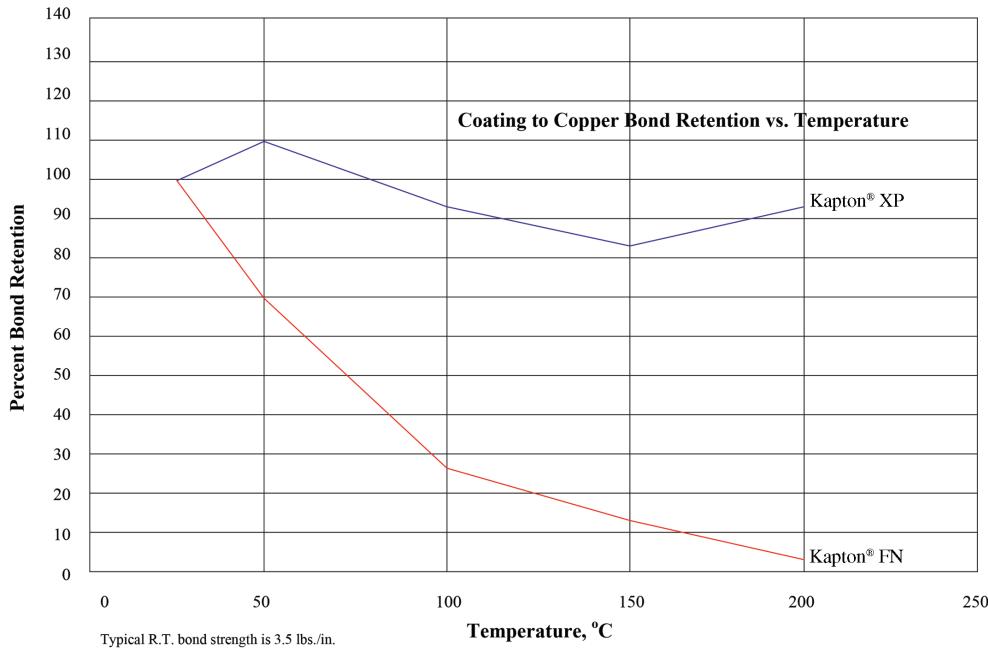
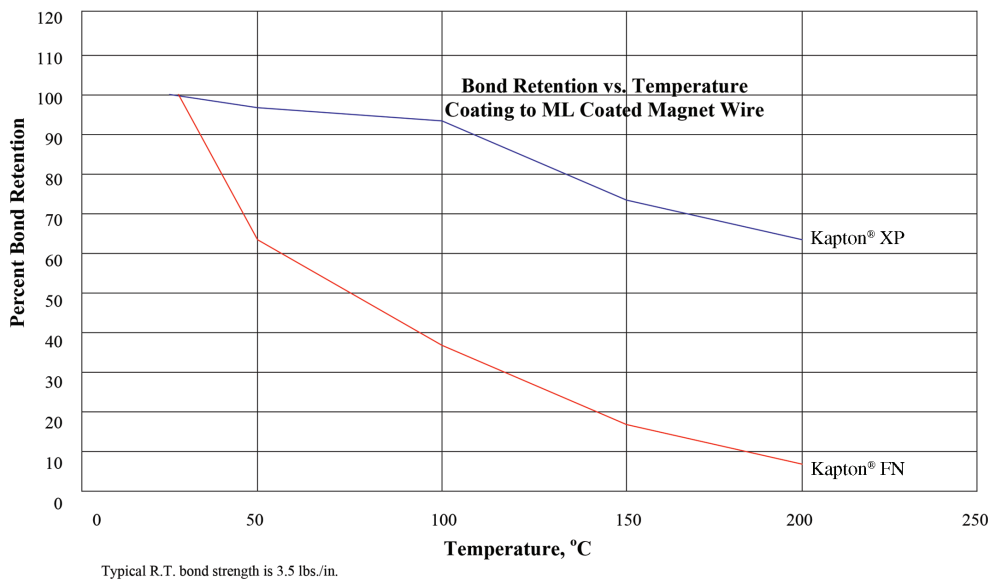


Figure 4. Kapton® XP vs. Kapton® FN



For more information on DuPont™ Kapton® polyimide films or other DuPont products, please visit our website.

[kapton.com](http://kapton.com)

The information provided in this data sheet corresponds to our knowledge on the subject at the date of its publication. It may be subject to revision as new knowledge and experience becomes available. This information is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. Since we cannot anticipate all variations in end-use and disposal conditions, DuPont makes no warranties and assumes no liability in connection with any use of this information. It is intended for use by persons having technical skill, at their own discretion and risk. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Applications CAUTION" and "DuPont Medical Applications POLICY" statements. These documents are available upon request.

DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ™, ® or ® are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. Copyright © 2020 DuPont de Nemours Inc. All rights reserved.

EI-10149 (7/20)