

# CHLORINE + BROMIDE FREE FR FILMS

## 環境対応型難燃フィルム

These environmentally responsible, UL compliant, translucent or opaque films deliver non-brominated, non-chlorinated, flame retardant performance at various gauges range.

EFRシリーズは、ULに準拠した難燃性を環境対応型の非臭素・非塩素系難燃システムで実現した、透明乳白色や不透明色のフィルムをあらゆる厚みで提供します。

### POTENTIAL APPLICATIONS

- Heat/dielectric insulation & EMI shielding
- Die-cut insulators and spacers
- Battery packs and adaptors
- Printed circuit boards for Desktop, Server

### KEY BENEFITS

- Non-halogenated (no Chlorine or Bromine) films
- UL-94 recognition, VTM-0 to V-0
- Excellent puncture resistance
- Excellent thermal, electrical and mechanical properties
- Increased chemical and hydrolytic resistance (NORYL™ EFR film)
- Increased heat resistance (ULTEM™ film)

### 用途例:

- 熱/誘電遮へいおよび絶縁壁
- EMI遮断
- 打抜き絶縁シートやスペーサー
- デスクトップおよびサーバー向けのプリント回路基板
- コンピューター、ラップトップ、携帯 電話用のバッテリーパックおよびアダプター

### 主な利点:

- 非塩素系、非臭素系難燃剤
- UL-94承認、VTM-0からV-0
- 優れた突き刺し抵抗
- 高レベルの熱的、電気的、および 機械的特性
- 耐薬品性および耐加水分解性が 強化 (ノリル™ EFR735)
- 耐熱性が強化(ウルテム™ 1000B)

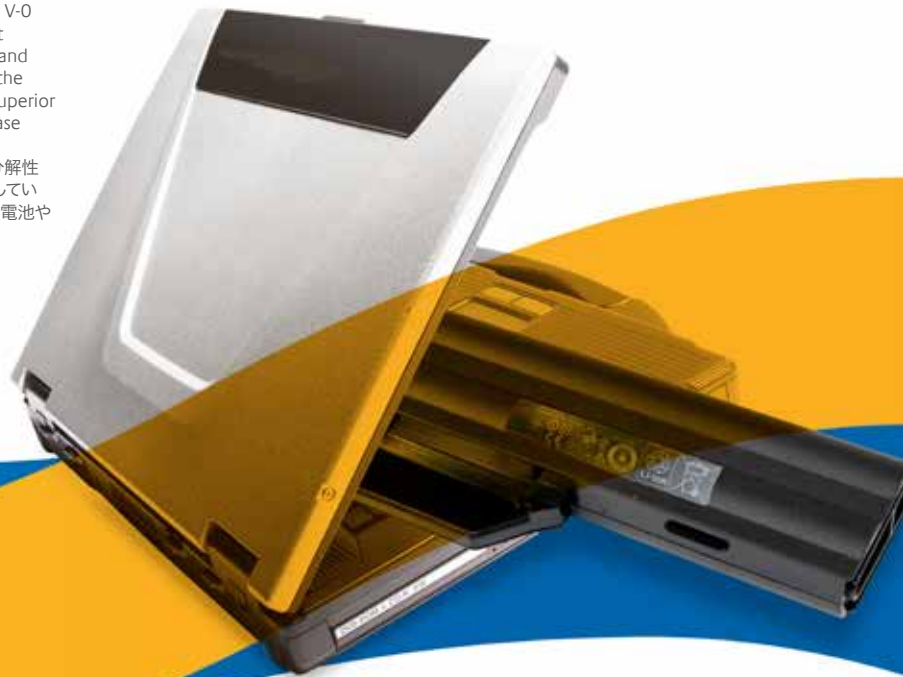


### NORYL™ EFR735 FILM

#### ノリル™ EFR735フィルム

Featuring non-halogenated flame retardant behavior with the UL® 94 V-0 compliance. This product may be used as the photovoltaic back sheet substrate by replacing PET film, providing superior hydrolysis stability and good lamination, adhesion properties. Additionally it may be used in the battery spacer insulation of hybrid and electrical vehicles, providing superior chemical resistance to corrosive electrolyte solutions in the battery case

ノンハロゲン難燃システムを採用し、UL94 V-0の難燃性能。優れた耐加水分解性とラミネート性能、接着性をもつことから太陽電池バックシート用の基材に適しています。また、その優れた耐薬品性は電解液に対する優れた耐性を示し各種二次電池やEVやHEVの絶縁スペーサーとしての採用が見込まれます。



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