

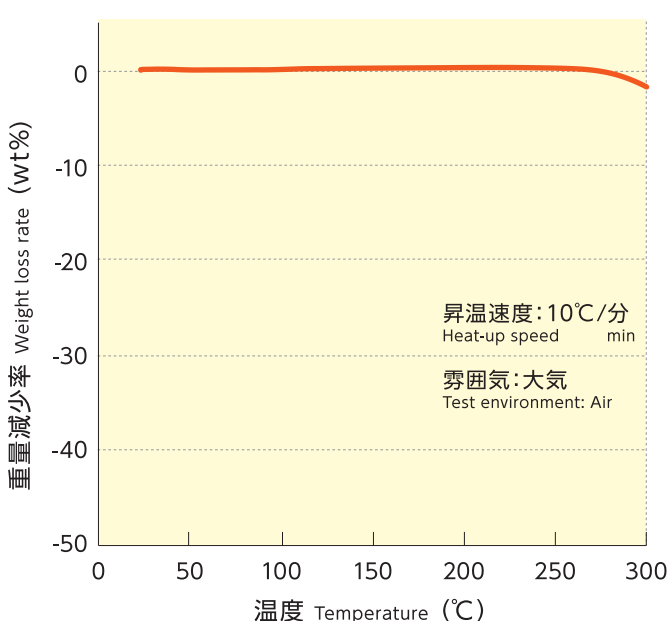
# 高絶縁・高耐熱性コーティング剤

High Electrical-insulation and Heat-resistant Coating Solution

# Protector HB-HR1

- ▶ 高絶縁、高耐熱性に優れた透明なシリカ系薄膜を形成  
Form silica-based thin coating, realize high electrical-insulation and heat-resistance by transparent films
- ▶ 密着性が高く、耐屈曲性に優れる  
High adhesion and excellent in folding resistance
- ▶ 素材の耐食性を向上  
Improve corrosion resistance

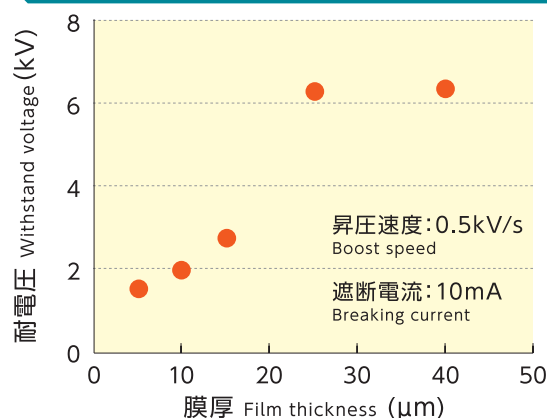
## 耐熱性に優れた絶縁塗膜 Insulating film with excellent heat resistance



加熱温度と重量減少率の関係  
Relationship between heat-treatment temperature and weight loss rate

**300°Cの熱でも皮膜特性を維持**  
Maintain film properties under 300°C

## 電気絶縁性に優れる Excellent electrical insulation



## 耐屈曲性と硬度を両立 High folding endurance, high hardness



## 高硬度な皮膜がスプレーで簡単に施工可能 Can obtain hard film by spraying

膜硬度 Film hardness	傷つき硬度 Scratch hardness *1	3H
	破壊硬度 Fracture hardness *1	4H
密着性 Adhesion *2		100/100 (剥離なし No peel-off)
透過率 Transparence		93%
ヘイズ Haze		0.1%
耐食性 (300°C 1時間熱処理後) Corrosion resistance (after heat treatment at 300°C for 1h)		白錆発生 SST 800時間以上 White rust occurrence: SST over 800h 比較: アルミニウム(A1050) 24時間未満 For aluminum (A1050), white rust occurrence: SST below 24h
推奨膜厚 Recommended thickness		10μm

\*1 鉛筆硬度試験 (JIS K 5600-5-4準拠) Pencil hardness test (Conforming to JIS K5600-5-4)

\*2 クロスカットテープ剥離試験 Cross cut tape test