アリル型硬化剤

Allyl-typed hardeners

開発品

アリル化合物を硬化剤として用いることで、一般的な硬化剤と比べ少量添加で
薄膜の高 Tg 化・低誘電率化を達成した。

Our product improved Tg and relative permittivity value of PPE compared to a conventional hardener at lower addition level.

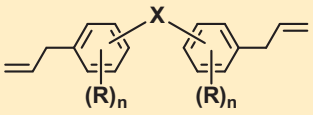
用途例　Usage

PPE (Polyphenylene ether)、BMI (Bismaleimide) 硬化剤

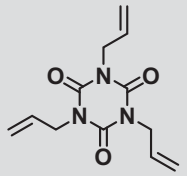
熱物性　Thermal property

	NA-1	Triallyl isocyanurate
Appearance	Pale yellow liquid	Pale yellow liquid or white solid
T_{d5} (℃)	211	176
T_m (℃)	—	23-27

T_{d5} : 5% weight loss temperature
T_m : melting temperature

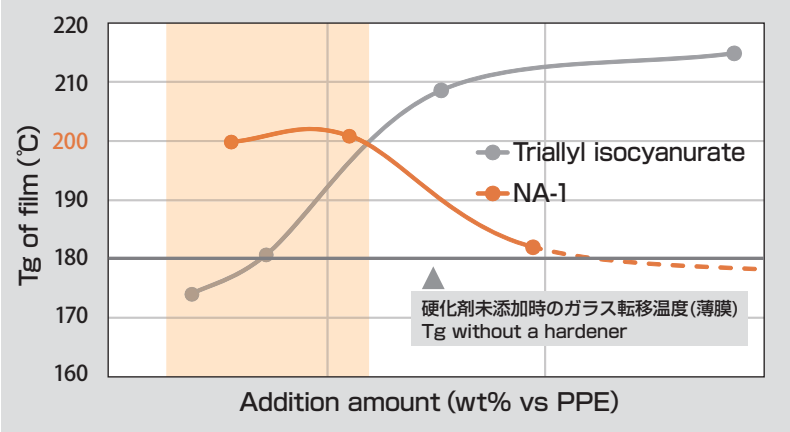


アリル化合物
Allyl compound



トリアリルイソシアヌレート
Triallyl isocyanurate

薄膜のガラス転移温度　Tg of film



Base polymer : PPE
Radical initiator : Dicumyl peroxide
Tg measurement conditions of the film
Equipment: Hitachi High-Tech Science TMA 7100
Sample size: Width 3mm, Length 20mm
Conditions: Under nitrogen atmosphere
Load : 200mN
Temperature range : 30℃ to 300℃
Temperature rise rate : 4℃/min
Measurement mode: Tensile

薄膜特性　Thermal and electrical properties

	NA-1	Triallyl isocyanurate
Tg (℃)	201	221
Relative permittivity	2.44	2.51
Blending ratio of a hardener (wt% vs PPE)	5.8	25