

# 特殊ビスフェノール誘導体

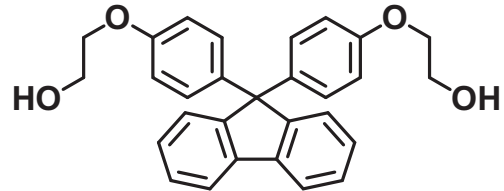
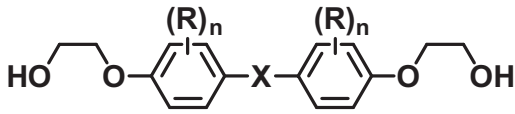
Derivatives from Specialty Bisphenols

ヒドロキシエチルエーテル化による光学レンズモノマーやリン酸エステル化による難燃剤への適用を通じ、特殊ビスフェノールの誘導体開発に取り組んでいます。

The continual efforts focus on the chemical modification of Specialty Bisphenols by Hydroxy-ethyl-etherification, Phosphorylation, etc., aiming to get the functional materials with the outstanding optical characteristics or the flame retardancy.

## 光学用途への展開 For Optical Applications

### ● ジオールへの誘導



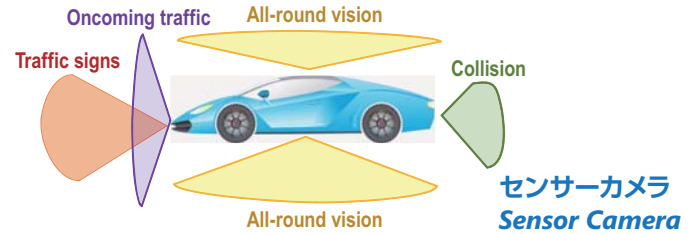
BisPEO-FL



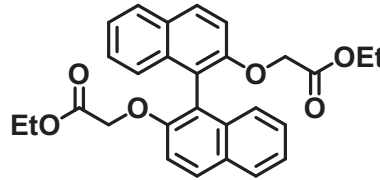
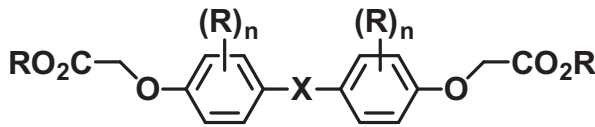
スマートフォンカメラレンズ  
Smartphone Camera Lens



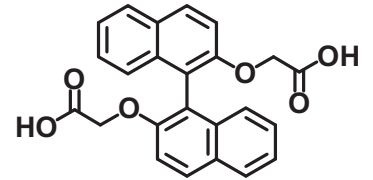
光学レンズ  
Optical Lens



## その他誘導体への展開



BINOL-DEC



BINOL-DC

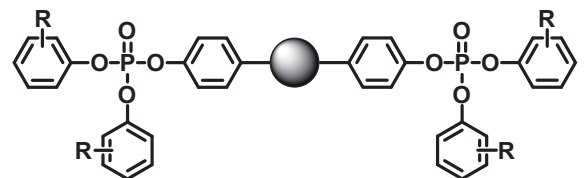
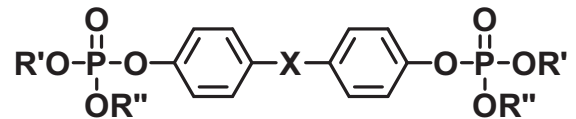
## 難燃剤への展開 (リン酸エステル誘導体) For Flame Retardant (FR, Phosphoric Acid Ester Derivatives)

- 耐熱性向上・流動性改善の両立  
Improvement of Heat Resistance Compatible with Enhanced Flowability

- 特殊ビスタイプ  
Phosphoric FR from Specialty Bisphenol

	難燃剤無添加	BPAタイプ	特殊ビスタイプ
燃焼性 UL-94 (1/8 inch)	Burn	V-0	V-0
熱変形温度 HD[°C] (1.82MPa)	120	85	95
熔融流動性 MFR [g/10min]230°C・5.00kg	3	20	25
衝撃強さ Izod [J/m] (1/8 inch)	600	600	550
比誘電率[εr] (添加部数:1GHz)	2.78	3	2.64
誘電正接[tanδ] (添加部数:1GHz)	0.0091	0.0081	0.0066

難燃性、樹脂物性データ(PC/ABS)、誘電性データ(エポキシ樹脂)



固体状態で耐加水分解性が良好  
Solid with Excellent hydrolysis resistance.

