

A P P E N D I X

LIST OF ABBREVIATIONS

ADPPO	Allyl diphenyl phosphine oxide
AIBN	2,2'-Azobisisobutyronitrile
γ-BL	γ -Butirolactone
BOE	Bycicloorthoester
BTMA	Benzyl trimethylammonium chloride
COSY	Correlation spectroscopy
DBU	1,8-diazabicyclo[5.4.0]-undec-7-ene
DCC	Dicyclohexylcarbodiimide
DEMMP	Diethyl(methacryloyloxymethyl)phosphonate
DEPT	Distortionless enhanced polarization transfer
DEVP	Diethyl vinyl phosphonate
DGEBA	Diglycidyl ether of bisphenol A
DMAP	4-(N,N-dimethylamino)pyridine
DMTA	Dynamic thermomechanical analysis
DOPO	9,10-dihydro-9-oxa-10-phosphaphenantrene-10-oxide
DOPO-BQ-Gly	10-(2',5'-Bis(glycidyoxy)phenyl)-9,10-dihydro-9-oxa-10-phosphaphenantrene-10-oxide
DOPO-Gly	9-(9,10-dihydro-9-oxa-10-phosphaphenantrene-10-oxide)

	oxide)-2,3-epoxy propyl
DOPOMA	2-[10-(9,10-dihydro-9-oxa-10-phosphaphenantrene-10-oxide-10-yl)] maleic acid
DSC	Differential scanning calorimetry
EDC	N-(3-Dimethylaminopropyl)-N'-ethyl-carbodiimide
EPC	Epichlorohydrin
FTIR	Fourier transform infrared spectroscopy
GPC	Gel permeation chromatography
HSQC	Heteronuclear single quantum correlation
IHPO	Isobutyl bis(hydroxypropyl) phosphine oxide
IHPO-Gly	Isobutyl bis(glycidyl propyl ether) phosphine oxide
LOI	Limiting oxygen index
MASS	Magic angle sample spinning
MCPBA	m-Chloroperbenzoic acid
Mw	Molecular weight
NMR	Nuclear magnetic resonance
PGE	Phenyl glycidyl ether
SEM	Scanning electron microscopy
SOC	Spiroorthocarbonate
SOE	Spiroorthoester
SOE-Ac	1,4,6-Trioxaspiro [4,4]-2-nonylmethyl acetate
SOE-AC	1,4,6-Trioxaspiro [4,4]-2-nonylmethyl acrylate
SOE-AChom	Poly[(1,4,6-trioxaspiro [4,4]-2-nonylmethyl acrylate
SOE-Br	2-Bromomethyl-1,4,6-trioxaspiro [4,4] nonane
SOE-DOPOMA	Bis[(1,4,6-trioxaspiro [4,4] nonan-2-yl)-methyl] 2-[10-(9,10-dihydro-9-oxa-10-phosphaphenantrene-10-oxide-10-yl)] maleate
SOE-OH	2-Hydroxymethyl-1,4,6-trioxaspiro [4,4] nonane
SOE-OSi	1,4,6-Trioxaspiro[4,4]-2-nonylmethyl trimethylsilyl ether
SOE-P	(1,4,6-Trioxaspiro [4,4] nonan-2-yl)-methyl 3-[10-(9,10-dihydro-9-oxa-9-phosphaphenantrene-10-oxide
SOE-PGE	2-Phenoxymethyl-1,4,6-trioxaspiro [4,4] nonane

Appendix

SOE-Si	1,4,6-Trioxaspiro [4,4]-2-nonylmethyl 3-trimethylsilyl propionate
ST	Styrene
TGA	Thermogravimetric analysis
TMS	Tetramethylsilane
Tg	Glass transition temperature
XRD	X-Ray diffraction

