

Abbreviations used in the thesis

AR	Alkyd resin
ASTM	American society for testing and materials
BNC	Bionanocomposite
CA	Citric acid
cm	Centimeter
c-MWCNT	Acid functionalized multiwall carbon nanotube
CNT	Carbon nanotube
cSt	Centistokes
DDA	Decamethylene diamine
DSC	Differential scanning calorimetry
DMSO	Dimethyl sulfoxide
DP	Degree of polymerization
DTG	Differential thermogram
EAR	Epoxidized alkyd resin
EG	Expanded graphite
EJO	Epoxidized jatropha oil
EQV	Epoxy equivalent weight
ESO	Epoxidized soybean oil
EVO	Epoxidized vegetable oil
FFA	Free fatty acid
FT-IR	Fourier transform infrared spectroscopy
FVOs	Functionalized vegetable oils
GNP	Graphite nanoplatelets
GO	Graphene oxide
GPC	Gel permeation chromatography

ha	Hactor
HBA	Hyperbranched alkyd
HBUA	Hyperbranched urethane alkyd
HIV	Human immunodeficiency virus
HRTEM	High resolution transmission microscopy
HV	Hydroxyl value
IPA	Isophthalic acid
JO	Jatropha oil
kV	Kilovolt
LOI	Limiting oxygen index
MA	Maleic anhydride
MDI	Methylene-4, 4'-diphenyldiisocyanate
MEKP	Methyl-ethyl ketone peroxide
mg	Milligram
mL	Milliliter
mm	Millimeter
MMT	Montmorillonite
MPa	Mega Pascal
MT	Metric ton
MWCNT	Multi walled carbon nanotube
nm	Nano meter
NMR	Nuclear magnetic resonance
PA	Phthalic anhydride
PANI	Poly(aniline)
Pa.s	Pascal second
PBS	Phosphate buffer solution

PESD	Poly(epoxidized soybean oil-co-decamethylene diamine)
SEM	Scanning electron microscopy
SO	Soybean oil
SWCNT	Single-walled carbon nanotube
TDI	Toluenediisocyanate
TEM	Transmission electron microscopy
TGA	Thermogravimetric analysis
THF	Tetrahydrofuran
TMP	Trimethylol propane
UG	Unexpanded graphite
UTM	Universal testing machine
UV	Ultra violet
XRD	X-ray diffraction
μm	Micro meter
Å	Angstrom