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ABBREVIATIONS AND SYMBOLS

Ar aryl

b.p. boiling point

n-BuLi *n*-butyllithium

c concentration

calc. calculated

d doublet (spectral)

dd double of doublets (spectral)

ddd double of double doublets (spectral)

d.e. diastereomeric excess

dq double of quartets (spectral)

DMAP 4-(N,N'-dimethylamino)pyridine

DMF N,N-dimethylformamide

e.e. enantiomeric excess

EtOAc ethyl acetate

J coupling constant

hr (s) hour (s)

HMPA hexamethylphosphoramide or

hexamethylphosphoric triamide

Hz hertz

IR infrared radiation

lit. literature

LDA lithium diisopropylamide

m multiplet (spectral)

m-CPBA m-chloroperbenzoic acid

min minute (s)

ml millilitre

m.p. melting point

Me methyl

MHz megahertz

NMR nuclear magnetic resonance

MOESY nuclear overhauser enhancement spectroscopy

MW molecular weight

ppm parts per million (in NMR)

PLC preparative layer chromatography

RT = rt room temperature (°C)

s singlet (spectral)

t triplet (spectral)

r temperature (°C)

THF tetrahydrofuran

TLC thin layer chromatography

TMEDA N,N,N',N'-tetramethylethylene diamine

 $[\alpha]$ specific optically rotation

v wave number (cm⁻¹)

 δ chemical shift (ppm)

 λ wave number (cm⁻¹)

 μ l microlitre



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