
Thomas Becker

Investigation of the Co-Polymerisation of Ethene and 1,7-Octadiene under High-Pressure Conditions

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Investigation of the Co-Polymerisation of Ethene and 1,7-Octadiene under High-Pressure Conditions

- Untersuchung der Co-Polymerisation von Ethen und 1,7-Oktadien unter
Hochdruck-Bedingungen -

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II Abbreviations

CAD	computer aided drawing
C-C	carbon-carbon
CFD	computational fluid dynamics
CLD	chain length distribution
cld	chain-length dependent
comb.	recombination
COM	component object model
CSTR	continuously stirred tank reactor
CTA	chain transfer agent
C_{tr}	chain-transfer coefficient
disp.	disproportionation
DTBP	di-tert-butyl-peroxide
E_A	activation energy
$f(M)$	number distribution
GC	gas chromatograph
GPC	gel-permeation-chromatograph
HDPE	high-density-polyethylene
HP	high-pressure
HPS	high-pressure separator
HT	high-temperature
IR	infrared
k	rate coefficient
LCB	long-chain branch
LDPE	low-density-polyethylene
LPS	low-pressure separator
M	monomer
M_M	mass of a monomeric unit
M_n	number average molecular weight
MS	mass spectrometer
M_w	weight average molecular weight
M_z	centrifugation average molecular weight
MWD	molecular weight distribution

ncl	not-chain-length dependent
NMR	nuclear magnetic resonance
P_n	degree of polymerisation
p	pressure
p	propagation
PA	propionic-aldehyde
PC-SAFT	perturbed chain statistical associating fluid theory
PDI	polydispersity index
PE	polyethylene
PID	proportional-integral-differential
Pol	polymer
R	radical
SCB	short-chain branch
sec	secondary
SET	single electron transfer
T	temperature
t	termination
TBPA	tert-butyl-peroxy-acetate
tr	transfer
X	conversion
XLPE	crosslinked-polyethylene
μ_0	zeroth moment