

Derwent World Patents Index Polymer Indexing

Summary of new concepts and codes introduced January 2004

Polymer Descriptors

- H0351 Dendrimer (04)**
"Not used for hyperbranched polymer. For hyperbranched use B5005 Degree of branching."
- H0362 End functional polymer (04)**
"Used for any polymer with end functional (i.e. reactive) group(s) that would not normally be present. The end functional groups must be for use or potential use in a reaction. In addition end modification will be indexed, if applicable. Examples include vinyl terminated polysiloxane and hydroxy terminated polybutadiene. The following examples would not be indexed as End functional polymer - carboxy terminated polyester, polyether polyols, NCO terminated polyurethane."
- H0373 NT Amine end functional polymer (04)**
"Polymer-C-N(CH₂)₂"
- H0384 NT Carboxy end functional polymer (04)**
"Including salts. Polymer-CO₂H!"
- H0395 NT C-C unsaturation end functional polymer (04)**
"Polymer-C=C or Polymer-C≡C"
- H0408 NT Epoxy end functional polymer (04)**
"Including any group containing an epoxy group"
- H0419 NT Hydroxy end functional polymer (04)**
"Polymer-C-OH"
- H0420 NT Other end functional polymer (04)**
- H0191 Macromer as modified polymer*
"Oligomer or polymer"
SA End functional polymer
- H0340 Telechelic polymer (96)*
"Used for....."
SA End functional polymer

Polymer formers

- G0260 Acrylics monoolefinic
.....
- G0339 NT Acrylic esters monoolefinic
G0340 NT Acrylic acid esters monoolefinic
.....
- R24091 NT Lauryl acrylate (04)**
R24092 NT Stearyl acrylate (04)
R24093 NT Cyclohexyl acrylate (04)
R24094 NT Isobornyl acrylate (04)
R24095 NT Benzyl acrylate (04)
R21505 NT Dimethylaminoethyl acrylate (04)
R24096 NT Acryloxypropyl trimethoxy silane, 3- (04)
R24105 NT Isocyanatoethyl acrylate, 2- (04)

G4079	NT Adamantyl acrylates (gen) (04) "Optionally substituted"
R24106	NT Adamantyl acrylate (04)
G4080	NT Other adamantyl acrylate (04)
G0384	NT Methacrylic acid esters monoolefinic
.....
R24097	NT n-Hexyl methacrylate (04)
R24098	NT Phenoxyethyl methacrylate (04)
G4091	NT Adamantyl methacrylates (gen) (04) "Optionally substituted"
R24099	NT Adamantyl methacrylate (04)
G4104	NT Other adamantyl methacrylate (04)
G4137	NT Vinyl caprolactones (04)
G4148	NT Vinyl amides, N- (04)
R11746	NT Vinyl acetamide, N- (04)
R08072	NT Vinyl formamide, N-
G4159	NT Vinyl amide, N- other (04)
G0975	Triolefinic and higher
G4115	NT Tri- or higher acrylates (04)
R05388	NT Trimethylolpropane triacrylate
R05389	NT Trimethylolpropane trimethacrylate
R21451	NT Pentaerythritol triacrylate
R17444	NT Pentaerythritol tetraacrylate (04)
R15746	NT Dipentaerythritol pentaacrylate (04)
R15747	NT Dipentaerythritol hexaacrylate (04)
G4126	NT Tri- or higher acrylates, other (04)
R05364	NT Triallyl cyanurate
R00733	NT Triallyl isocyanurate
R12852	NT Tetramethyltetravinylcyclotetrasiloxane
G2357	NT Polyallyl sucrose
G0986	NT Triolefinic or higher, other
G2062	Amino Acids
R00114	NT Aspartic acid (04) UF 2-Amino-succinic acid
R01655	NT Lysine (04) UF 2,6-Diamino-hexanoic acid
G2108	Hydroxy acids
R01656	NT Malic acid (04) UF Hydroxybutanedioic acid UF 2-Hydroxy-succinic acid

Polymer Types

P0442	(Methylene) Arylene polymer
P8106	NT Polyfluorenes (04) "Optionally substituted"
P0635	Polyamide
.....
P8117	NT Nylon 6/66/6T (04) "Specific repeat units only, no other repeat unit present."

P8128 **NT Nylon 6/66/6I (04)**
 "Specific repeat units only, no other repeat unit present."
P8139 **NT Nylon 66/6T (04)**
 "Specific repeat units only, no other repeat unit present."
P8140 **NT Nylon 66/6I (04)**
 "Specific repeat units only, no other repeat unit present."
P8151 **NT Nylon 6I/6T (04)**
 "Specific repeat units only, no other repeat unit present."
P8162 **NT MXD6 (04)**
 "Specific repeat units only, no other repeat unit present."
 UF poly m-xylylene diadipamide

P0839 Polyester
 P1978 NT Saturated polyester
P8173 **NT Polypropylene terephthalate (04)**
 UF PPT
 UF Polytrimethylene terephthalate

P1445 Polysiloxane
 P1456 NT Polydimethylsiloxane
P8184 **NT Polymethylvinylsiloxane (04)**
 "Optionally end group modified"
P8195 **NT Polymethylphenylsiloxane (04)**
 "Optionally end group modified"
P8208 **NT Polyhydrogenmethylsiloxane (04)**
 "Optionally end group modified"
P8219 **NT Polysilsesquioxanes (04)**
 "Optionally substituted. Optionally end group modified"

Natural Polymers

G3623 Polysaccharides

 G3634 NT Cellulosics

 G3645 NT Cellulose esters
R24100 **NT Cellulose phthalate (04)**

 R24037 NT Gum arabic
R03231 **NT Hyaluronic acid (04)**

Chemicals

G2459 Amino silanes (gen)
R15564 **NT Gamma-amino propyl trimethoxy silane (04)**

R01191 **Cyclopentane (04)**

G4160 **Fullerenes (04)**
 "Optionally substituted"
 UF Nanotubes
 UF Buckyballs

R24101 **Hafnium dicyclopentadienyl dichloride (04)**

- R24102 Hydroxy cyclohexyl phenyl ketone (04)**
- G4171 Octanols (04)**
R00765 NT Ethylhexanol, 2-
- R24103 Titanium dicyclopentadienyl dichloride (04)**
- R24104 Zirconium dicyclopentadienyl dichloride (04)**

Chemical Aspects

Generic Sub-units

- D13 Alicyclic
.....
D17 NT Polycyclic alicyclic
D38 NT Adamantyl (04)
D39 NT Dicyclopentadienyl (04)
"3 ring alicyclic bridged ring"

- D18 Aromatic
.....
D21 NT Polycyclic aromatic
D100 NT Indenyl (04)
"Bicyclic aromatic"
D80 NT Fluorenyl (04)
"Tricyclic aromatic"

Number of rings

- D35 ≥ 5 rings
D96 NT 5 rings (04)
D97 NT 6 rings (04)
D98 NT 7 rings (04)
D99 NT ≥ 8 rings (04)

Broad Functionality Types:

-
D61 Salt/Complex
D62 NT Metallocene
D72 NT Bridged metallocene (04)

Carbon Count

- D95 $\geq 25C$
D28 NT 25-30C (04)
D29 NT 31-40C (04)
D30 NT $\geq 41C$ (04)

NO:

-
F73 Isocyanate
F57 NT Monoisocyanate (04)
F58 NT Diisocyanate (04)
F59 NT Tri or higher isocyanate (04)
- F69 Oxime O-ether (04)**
"=C=N-O-C! Non-functional C-bonded oxime or O-carbon oxime"
- F100 Amine Oxide (04)**
"R₃N-O"

Physical Operations

N7341 Developing (04)

“Physical removal of resist, e.g. by dissolving. Dissolving also coded if appropriate”

Equipment

J2904	Construction materials
J2915	Equipment
J2926	NT Autoclaves
J7034	NT Coating equipment (04)
J5812	NT Cooler/Heat exchanger (04)
J6780	NT Dryer (04) UF Spray dryer
J6611	NT Equipment control devices (04) UF devices which measure/control temperature, pressure etc. during other processes
J8366	NT Equipment for making packaging (04)
J5970	NT Extruder (04)
J6804	NT Filter (04) UF Breaker plate
J2937	NT Fluidised bed reactor
J6337	NT Material Handling equipment (04) UF Inlet equipment, feeding units, dosers UF Outlet equipment, wind-up units
J6439	NT Mixing unit (04) UF Mixing heads UF Kneader
J6440	NT Moulding equipment (04) “For moulds use J2948 in addition”
J6484	NT Injection moulder (04)
J6451	NT Blow moulder (04)
J2948	NT Moulds “Any mould used for polymer processing or polymerisation”
J2506	NT Polymerisation reactor (04)
J2959	NT Pumps
J2960	NT Rollers
J2971	NT Tubular reactor

Properties

B3190	Electrical properties SA Electroluminescence
B4240	Optical properties SA Electroluminescence
B4284	Electro-optical properties
B5696	NT Electroluminescence (04)
B4740	Structural properties
.....
B4977	NT Molecular properties
.....

B5005 NT Degree of branching
UF Branching distribution
SA Dendrimer

.....
B5107 NT Molecular weight distribution
B5118 NT Polydispersity
UF Multi-modal

Applications

Q7512 Electro-optical use
UF Cathode ray tubes
UF Light Emitting Diodes (LED)
UF Solar cells

Q9472 **NT Electroluminescent Devices (04)**
UF Organic Light Emitting Diodes (OLED)
UF Polymer Light Emitting Diodes (PLED)

Q9483 **Pigment/colo(u)rant system (04)**
"Polymer used in/as pigment/colo(u)rant system with
use unspecified. Excluding inks, paints"

Q8775 Printing

Q9494 **NT Substrate (04)**
UF Receiving Layer

Q9507 **Release sheets (04)**
SA Release Coatings