

Index

- Acetanilide, 86
Acetic acid, 8, 63, 67
Acetic anhydride, 159
Acetone, 8, 191
Acetophenone , 143
2-Acetoxy-benzoic acid (aspirine), 158
Acetyl chloride, 160
AIBN, 167–174
Aluminium oxide , 80, 81, 83, 88, 89, 98,
99, 101, 102
Ammonium acetate, 81, 137, 144, 154
Ammonium bicarbonate, 48
Ammonium molybdate, 164
Aniline, 85, 145
Anthracene, 70, 96, 165
trans-9,10-Dihydro-9,10-ethanoanthracene
dicarboxylic acid dimethyl ester,
165
Anthranilic acid, 141
Anthraquinone, 95
Aspartic acid, 189
2,2'-Azobis(2-methyl-propionitrile) (AIBN),
167, 169, 170, 172, 173
Benzaldehyde, 48, 49, 81, 84, 85, 137,
143–145, 151, 152, 154
Benzanilide , 121
Benzofuran-2-carboxylic acid ethyl ester,
108
Benzoyl chloride, 153
Benzyl bromide, 130
Benzyl chloride, 121, 123, 128
1-Benzyl-2,5-dimethyl-1H-pyrrole, 141
Benzyl-[1-phenyl-ethylidene]-amine, 148
N-Benzyl-phthalimide, 138
Benzylamine, 103, 139, 142, 148
2-Benzylidene-malononitrile, 150
1-Benzylimidazole, 128
Benzylphenyl ether, 123
Biphenyl, 50
Bis(triphenylphosphine)palladium(II) dichlo-
ride, 105
Bromobenzene, 86, 149
1-Bromobutane, 122, 125
3-Bromocarbazole, 64
Bromocyclohexane, 156
1-Bromodecane, 79
2-Bromoethyl)benzene, 101
1-Bromonaphthalene, 107
p-Bromonitrobenzene, 52, 83
1-Bromooctane, 93, 112, 119, 131, 135
8-Bromoctylsulfanylbenzene, 99
3-Bromopropyl)benzene, 102
2-Butanone, 79
Butyl acrylate, 169
N-Butylcarbazole, 124
N-Butylphthalimide, 122
2-Carbazol-9-yl-ethanol, 55
Carbazole, 55, 64, 65, 67, 125, 126
Carbethoxymethylene triphenylphospho-
rane, 54
Cellulose, 186
Cesium fluoride, 102
9-(2-Chloroethyl)carbazole, 74
9-(2-Chloroethyl)carbazole-3-carbaldehyde,
74
Chloroform, 62, 191
Copper iodide (I), 86, 88
Cupric (II) chloride, 163, 164
Cupric chloride (I) , 80
Cyclohexane, 191

- Cyclohexanol, 60, 156
- Cyclohexanon, 59, 91
- Cyclohexanone, 91
- 1,4:3,6-dianhydrosorbitol (isosorbide), 130, 131, 184
- Dibenzylamine, 88
- 1,12-dibromododecane, 133
- 3,6-Dichlorocarbazole, 65
- Dichloromethane, 191
- 1,2-dicyanobenzene, 162
- Diethyl benzylidenemalonate, 151
- Diethyl ether, 191
- Diethyl malonate, 146, 147, 152
- 4-Diethylamino-2-hydroxybenzaldehyde, 109
- 6-Diethylamino-benzofuran-2-carboxylic acid ethyl ester, 109
- 3-Diethylaminophenol, 73
- 4-Diethylaminosalicylaldehyde, 72
- Diglycidyl ether, 177, 179
- 2,4-Dihydroxybenzaldehyde, 71
- 1,3-Dihydroxybenzene (resorcinol), 71
- Dimethyl fumarate, 165
- 5,5-Dimethyl-1,3-cyclohexanedione, 137
- 2,2-Dimethyl-1,3-dioxane-4,6-dione, 137, 154, 155
- 2,6-Dimethyl-4-phenyl-1,4-dihydro-pyridine-3,5-dicarboxylic acid diethyl ester, 47
- 7,7-Dimethyl-4-phenyl-4,6,7,8-tetrahydro-1H,3H-quinoline-2,5-dione, 137
- N,N-Dimethylaniline, 61
- Diocetyl ether, 112
- Diocetyl terephthalate, 135
- 1,2-Diphenyl-ethane-1,2-dione (benzil), 89
- (E)-1,3-Diphenyl-propenone (chalcone), 142
- N,N-Diphenylacetamide, 86
- Diphenylbutadiyne, 80
- 1,2-Diphenylethanedione, 81
- DMF, 7, 8, 19, 39, 41, 55, 57, 70, 71, 73, 74, 76, 80, 192
- DMSO, 19, 39, 54, 192
- 1-Dodecene, 117
- Envirocat EPZG, 145, 153, 155, 160
- Epichlorohydrin, 126, 183
- 1,2-Epoxydodecene, 117
- N-(2,3-Epoxypropyl)carbazole, 126
- Ethanol, 6, 8, 48, 49, 137, 186, 192
- Ethyl 4-nitrophenylacetate, 98, 99
- Ethyl acetate, 8, 192
- Ethyl acetoacetate, 48, 49
- Ethyl chloroacetate, 108, 111
- Ethyl indole-2-carboxylate, 101
- Ethylene carbonate, 55, 57
- Ethylene chloride, 64, 66, 118
- Ethylene glycol, 180, 182
- 2-Ethylhexane-1,3-diol, 116
- Fluorene, 97
- 9-Fluorenone, 96
- 4-Fluoronitrobenzene, 157
- Formamide, 141
- 1,12-Bis(furan-2-ylmethoxy)dodecane, 133
- Furfuryl alcohol, 133
- Glycine, 140
- Hexan-2-one (Butyl methyl ketone), 90
- Hexane , 5, 6, 8, 20, 170, 192
- Hexane-2,5-dione , 142
- Hydrochloric acid, 49, 66, 192
- Hydrogen peroxide, 58
- Hydroiodic acid, 63, 67
- 8-Hydroxy-1,1,7,7-tetramethyljulolidine, 75, 76
- 2-Hydroxy-1,2-diphenyl ethanone (Benzoin), 89
- 2-Hydroxy-1-naphthaldehyde, 111
- 2-Hydroxy-benzaldehyde, 146, 155
- 2-Hydroxybenzaldehyde, 108
- 2-Hydroxy-benzoic acid, 159
- 3-Hydroxymethylheptan-4-one, 116
- 2-Imidazol-1-yl-ethanol, 56
- Imidazole, 57, 128
- Iodine, 61
- 2-Iodo-4-nitroaniline, 62

- 4-Iodo-N,N-dimethylaniline, 61
- Iodobenzene, 51, 105
- 4-Idobutoxybenzene, 98
- 3-Iodocarbazole, 66
- 1-Iododecane, 78
- Iron (III) chloride hexahydrate, 68
- Isooctyl acrylate, 170
- KOH, 181, 183
- Magnesium sulfate, 192
- Maleic anhydride, 70, 180, 182
- Malononitrile, 151
- Methanol, 6, 8, 60, 68, 77, 192
- (4-Methoxy-naphthalen-1-yl)-phenyl-methanone, 152
- 1-Methoxynaphthalene, 153
- methyl acetoacetate, 154
- Methyl chloroacetate, 109
- Methyl methacrylate, 167
- 6-Methyl-2-oxo-4-phenyl-1,2,3,4-tetrahydro-pyrimidine-5-carboxylic acid ethyl ester, 49
- 3-Methyl-2-propyl-1H-indole , 90
- 4-Methylacetophenone, 160
- 2-Methylimidazole, 177, 179
- 1-Methylpyrrolidone (NMP), 86
- Montmorillonite K10, 85
- Montmorillonite KSF, 90
- 2-Naphthol, 68
- 2-Nitro-1-phenyl-propan-1-ol, 83
- 1-Nitro-4-phenylethylnyl-benzene, 52
- 3-(4-Nitro-phenyl)-acrylic acid ethyl ester, 53
- 1-(4-Nitro-phenyl)-piperidine, 82, 157
- p-Nitroaniline, 63
- p-Nitrobenzaldehyde, 54
- Nitroethane, 84
- Nitromethane, 144
- 2-(4-Nitrophenyl)-10-phenylsulfanyl-decanoic acid ethyl ester, 99
- 2-(4-Nitrophenyl)-6-phenoxyhexanoic acid ethyl ester, 97
- 2-Octanol, 95
- Octan-2-one, 94, 115
- Octanal, 93
- Octanoic acid, 113
- 2-Octanol, 115
- Octyl acetate, 92
- Octyl alcohol, 94, 112, 114
- 1-Octyl-azepan-2-one (N-Octylcaprolactam), 119
- 2-Oxo-2H-chromene-3-carboxylic acid, 146, 155
- 2-Oxo-2H-chromene-3-carboxylic acid ethyl ester, 146
- Palladium acetate (II), 51, 52, 107, 149
- Paraformaldehyde, 88
- Petroleum ether, 192
- 1-Phenethylindole-2-carboxylic acid ethyl ester, 100
- Phenol, 123
- Phenyl boronic acid, 51, 107
- 5-Phenyl-2-((1-phenylmethylidene)amino) pentanoic acid methyl ester, 102
- Phenyl-[1-phenyl-methylidene]amine, 85, 144
- 1-Phenyl-methylidene)amino)acetic acid methyl ester, 102
- 3-[1-Phenyl-methylidene]-3H-isobenzofuran-1-one, 161
- 1-Phenyl-naphthalene, 106
- Phenylacetic acid, 103, 161
- Phenylacetylene, 52, 80, 88
- Phenylhydrazine, 90
- Phosphorous acid, 186
- Phosphorus oxychloride, 71, 73, 74, 76
- Phthalic anhydride, 139, 140, 161, 164, 180, 182
- Phthalimide, 122
- Phthalocyanine, 162, 163
- N-Phthaloylglycine, 139
- Piperidine, 83, 146, 147, 152, 157
- Poly(dichlorophosphazene), 187
- Poly(ethylene glycol), 51

- Poly(methyl methacrylate), 167
Polyphosphazene, 187
Polystyrene, 174
Potassium acetate, 93, 161
Potassium carbonate, 86, 105, 108, 109,
 111, 112, 119, 121, 122, 124, 125,
 127, 128, 135
Potassium fluoride, 51, 80
Potassium fluoride/ Aluminium oxide , 80
Potassium hydroxide, 112, 119, 121, 124,
 127, 129, 130, 132, 134, 184
Propylene carbonate, 189
Pyridine, 58
Pyridine N-oxide, 58

3H-Quinazolin-4-one, 140

Silica gel, 84, 91, 93, 192
Sodium bromide , 156
Sodium carbonate, 107
Sodium hydride, 187
Sodium hydroxide, 55, 57, 77, 193
Sodium iodate, 79
Sodium sulfite, 61
Sodium tungstate dihydrate, 58, 60, 65,
 114–116, 118
Styrene, 105, 149
Sulphuric acid, 143, 156, 193

TBAB, 105, 107–109, 111, 112, 119, 121–
 123, 125, 126, 128, 130, 131, 185,
 188
Terephthalic acid, 135
Tetrabutylammonium bromide , 105, 107–
 109, 111, 112, 119, 121–123, 125,
 126, 128, 130, 131, 185, 188
Tetrabutylammonium fluoride, 98, 99, 101
Tetrabutylammonium hydrogen sulfate ,
 60, 114–116
THF, 54, 188, 193
Toluene, 94–97, 127, 132, 160, 167, 172,
 173, 185, 193
Tri-o-tolylphosphine, 149
Triethylamine , 52, 149
2,4,5-Triphenylimidazole, 81
Triphenylphosphine, 52, 151
Urea, 49, 60, 61, 164, 186
Urea hydrogen peroxide, 60, 61
9-Vinylcarbazole, 172
Water, 5, 6, 8, 11, 62, 68, 77, 89, 91, 105,
 107, 186, 188, 189
Xylene, 130, 139, 140, 181, 193
Zinc (II) chloride, 148