

<u>Acids</u>	<u>bp</u>	<u>Amide derivative mp</u>
formic acid	101	43
acrylic acid	139	85
propionic acid	141	81
valeric acid	185	106
octanoic acid	237	107

<u>Acids</u>	<u>mp</u>	<u>Amide derivative mp</u>
hydrocinnamic acid	48	105
stearic acid	68	109
crotonic acid	72	158
phenylacetic acid	78	156
o-toluic acid	104	142
m-toluic acid	109	94
DL-mandelic acid	120	133
benzoic acid	122	130
maleic acid	135	260 (di)
2-chlorobenzoic acid	139	139
3-nitrobenzoic acid	141	143
anthranilic acid	144-148	109
diphenylacetic acid	148	167
adipic acid	152	125 (mono) 220 (di)
citric acid	153	210 (tri)
salicylic acid	159	142
5-bromosalicylic acid	165	232
itaconic acid	166	191 (di)
4-toluic acid	181	160
4-anisic acid	182-185	167
succinic acid	187-190	157 (mono) 260 (di)
3-hydroxybenzoic acid	202	170
3,5-dinitrobenzoic acid	203-206	183
4-hydroxybenzoic acid	214	162
nicotinic acid	236-239	128
4-nitrobenzoic acid	240	201

<u>Alcohols</u>	<u>bp °C</u>	<u>3,5-dinitrobenzoate derivative mp °C</u>
methanol	65	108
ethanol	78	93
2-propanol	82	123
t-butanol	83	142
1-propanol	97	74
2-butanol	98	76
2-methyl-2-butanol	102	116
2-methyl-1-propanol	108	87
3-pentanol	114-115	101
1-butanol	118	64
2-pentanol	118-119	62
2-chloroethanol	129	95
2-methyl-1-butanol	130	70
4-methyl-2-pentanol	132	65
1-pentanol	136-138	46
cyclopentanol	139-140	115
2-ethyl-1-butanol	146	51
2,2,2-trichloroethanol	151	142
1-hexanol	157	58
cyclohexanol	160-161	113
furfuryl alcohol	170	170
1-heptanol	176	47
2-octanol	178	32
2-ethyl-1-hexanol	183-186	n.a.
1-octanol	195	61
ethylene glycol	196-198	169
benzyl alcohol	203-205	113
1-phenylethanol	204	95

<u>Alcohol</u>	<u>mp</u>	<u>3,5-dinitrobenzoate derivative mp</u>
cinnamyl alcohol	33-35	121
1-tetradecanol	38-40	67
1-hexadecanol	48-50	66
benzhydrol	66-67	141
cholesterol	147	195

<u>Aldehydes</u>	<u>bp</u>	<u>semicarbazone mp</u>	<u>2,4-dinitrophenylhydrazone mp</u>
acetaldehyde	21	162	168
propionaldehyde	46-50	89(154)	148
isobutyraldehyde	63	125(119)	187(183)
butyraldehyde	75	104	122
3-methylbutanal	90-92	107	123
crotonaldehyde	104	90	131
2-ethylbutanal	117	99	95(130)
heptaldehyde	153	109	108
2-furaldehyde	162	202	229
2-ethylhexanal	163	254	114(120)
benzaldehyde	179	222	237
salicylaldehyde	197	231	248
4-tolualdehyde	204-205	234(215)	232
2-chlorobenzaldehyde	209-215	146(229)	213
2-ethoxybenzaldehyde	247	219	n.a.
4-anisaldehyde	248	210	253
cinnamaldehyde	250-252	215	255

<u>Aldehydes</u>	<u>mp</u>	<u>semicarbazone mp</u>	<u>2,4-dinitrophenylhydrazone mp</u>
1-naphthaldehyde	33-34	221	254
2-anisaldehyde	37-39	215	254
3,4-dimethoxybenzaldehyde	42-45	177	261
4-chlorobenzaldehyde	44-47	230	254
3-nitrobenzaldehyde	57-59	246	293
vanillin	81-83	230	271

<u>Amides</u>	<u>bp</u>	<u>mp</u>
formamide	210	
n-methylformamide	243	
acetamide	79-81	
methacrylamide	109-111	
acetanilide	113-115	
2-chloroacetamide	116-118	
isobutyramide	127-129	
benzamide	128	
nicotinamide	130-133	
4-chloroacetamide	177-179	

<u>Amines</u>	<u>bp</u>	<u>acetamide mp</u>	<u>benzamide mp</u>
isopropylamine	33-34		71
t-butylamine	46		134
n-propylamine	48		84
diethylamine	55		42
isobutylamine	64-71		57
n-butylamine	78		42
diisopropylamine	84		n.a.
piperidine	106		48
ethylenediamine	118	172 (di)	244 (di)
morpholine	129		75
diisobutylamine	137-139	86	
benzylamine	182-185	60	105
aniline	184	114	163
N-methylaniline	196	102	63
2-toluidine	199	110	144
3-toluidine	203	65	125
N-ethylaniline	205	54	60
2-chloroaniline	209	87	99
2-ethylaniline	210	111	147
2,6-dimethylaniline	216	177	168
2-anisidine	225	85	60(84)
3-chloroaniline	230	72(78)	120
2-phenetidine	232	137	173
4-chloro-2-methylaniline	241	140	142

<u>Amines</u>	<u>mp</u>	<u>acetamide mp</u>	<u>benzamide mp</u>
4-toluidine	41-44	58	107
2,5-dichloroaniline	49-51	132	120
diphenylamine	52-54	101	180
4-anisidine	57-60	130	154
4-bromoaniline	66	168	204
4-chloroaniline	68-71	179(172)	192
2-nitroaniline	71-73	92	110(98)
1,2-phenylenediamine	100-102	185	301
2-methyl-5-nitroaniline	104-107	151	186
2-chloro-4-nitroaniline	107-109	139	161
3-nitroaniline	112-114	155(76)	157(150)
4-methyl-2-nitroaniline	115	99	148
4-chloro-2-nitroaniline	118	104	n.a.
4-nitroaniline	148	215	199

<u>Esters</u>	<u>bp</u>
methyl formate	169
ethyl formate	53
ethyl acetate	77
methyl propionate	79
isopropyl acetate	85
t-butyl acetate	98
ethyl acrylate	99
n-propyl acetate	102
ethyl butyrate	120
n-butyl acetate	127
methyl valerate	128
n-amyl acetate	142
isoamyl acetate	142
ethyl lactate	154
ethyl caproate	168
ethyl acetoacetate	181
methyl benzoate	198
ethyl benzoate	212
diethyl succinate	217
methyl salicylate	222

mp

ethyl p-nitrobenzoate	57
ethyl p-aminobenzoate	89
methyl p-nitrobenzoate	95
ethyl p-hydroxybenzoate	117
methyl p-hydroxybenzoate	127

<u>Ethers</u>	<u>bp</u>	<u>mp</u>
furan	32	
tetrahydrofuran	66	
n-butyl vinyl ether	94	
anisole	154	
4-methylanisole	174	
4-bromoanisole	215	
2-nitroanisole	273	
4-nitroanisole		51
1,4-dimethoxybenzene		56-60
2-methoxynaphthalene		74

<u>Halides</u>	<u>bp</u>
1,1-dichloroethane	57
2-bromopropane	59
2-chlorobutane	69
1,1,1-trichloroethane	75
trichloroethylene	87
2-bromobutane	91
3,4-dichloro-1-butene	123
chlorobenzene	132
bromoform	146-150
bromobenzene	156
4-chlorotoluene	162
1,3-dibromopropane	167
1,2-dichlorobenzene	178
1-bromodecane	238

<u>Halides</u>	<u>mp</u>
1,4-dichlorobenzene	55
1,4-bromochlorobenzene	67
1,4-dibromobenzene	88

<u>Hydrocarbons (aromatic)</u>	<u>bp</u>
toluene	111
p-xylene	138
m-xylene	138
o-xylene	144
styrene	145
cumene	153
mesitylene	163-166
p-cymene	177

<u>Hydrocarbons (aromatic)</u>	<u>mp</u>
biphenyl	69-72
naphthalene	81
phenanthrene	100
fluorene	112-115
anthracene	214-217

<u>Ketones</u>	<u>bp</u>	<u>semicarbazone mp</u>	<u>2,4-dinitrophenylhydrazone mp</u>
acetone	56	187	126
2-butanone	80	146	117
2-pentanone	100	111	144
3-pentanone	102	138	156
pinacolone	106	157	125
4-methyl-2-pentanone	115	132	95
5-hexen-2-one	128	102	108
cyclopentanone	130	207	143
4-heptanone	145	132	75
5-methyl-2-hexanone	145	147	95
2-heptanone	146	123	89
3-heptanone	146-149	101	81
cyclohexanone	156	166	162
2-methylcyclohexanone	162	195	137
3-methylcyclohexanone	169	180	155
2-octanone	173	122	58
5-nonanone	187	90	n.a.
acetylacetone	191	185 (mono) 224 (di)	257 (di)
acetophenone	202	198	245
phenylacetone	216	198	156
isobutyrophenone	217	181	163
propiophenone	218	182	191
butyrophenone	230	187	n.a.
2-undecanone	231	122	63
n-butyrophenone	232	188	191
4-chloroacetophenone	232	204	236
benzylacetone	235	142	127
valerophenone	242	166	n.a.

<u>Ketones</u>	<u>mp</u>	<u>semicarbazone mp</u>	<u>2,4-dinitrophenylhydrazone mp</u>
4-chloropropiophenone	36	176	223
4-methoxyacetophenone	37	198	228
benzophenone	48	167	238
2-acetonaphthone	54	235	262
3-nitroacetophenone	77	257	228
4-nitroacetophenone	79	n.a.	257
9-fluorenone	82-85	234	283
benzoin	135	206	245
4-hydroxypropiophenone	147-148	n.a.	240

<u>Nitriles</u>	<u>bp</u>
isobutylnitrile	107
benzotrile	191
2-tolunitrile	205
3-tolunitrile	212
4-tolunitrile	217

<u>Nitriles</u>	<u>mp</u>
propionitrile	97
stearonitrile	39
succinonitrile	47
diphenylacetoneitrile	72

<u>Nitro Compounds</u>	<u>bp</u>
nitrobenzene	210
2-nitrotoluene	225
3-nitrotoluene	230
4-ethylnitrobenzene	245

<u>Nitro Compounds</u>	<u>mp</u>
2-chloro-6-nitrotoluene	35
4-chloro-2-nitrotoluene	37
3,4-dichloronitrobenzene	41
4-nitrotoluene	53
1-chloro-4-nitrobenzene	83

<u>Phenols</u>	<u>bp</u>	<u>mp</u>
2-chlorophenol	175	n.a.
phenol	181	42
p-cresol	202	33
m-cresol	203	n.a.
o-cresol		32
2,4-dichlorophenol		42
4-ethylphenol		42-45
4-chlorophenol		44
2-nitrophenol		45
thymol		50
4-bromophenol		64-68
2,5-dimethylphenol		74
1-naphthol		95
4-t-butylphenol		98-101
catechol		104
resorcinol		109
4-nitrophenol		113
2-naphthol		121-124

