

INDEX

- acetic acid, 149, 167-168, 229, 263, 268, 299
 acetic anhydride, 149
 acetic ester, 229
 acetoacetic acid, 230
 acetoacetic ester, 230
 acetyl bromide, 150
 acetyl thermoplastics, 10
 acetylene dichloride, 199
 acrylamide, 151
 acrylic acid, 169, 170, 231
 acrylic amide, 151
 acrylic plastic, 9
 acrylic polymers, 9
 acrylonitrile, 152
 Adacene-12, 227
 adipic acid, bis(2-ethylhexyl) ester, 221
 Adipol 2EH, 221
 Adronal, 187
 agricultural chemicals, 9
 alcohol evaporation rates, 6
 alcohol, 3, 5, 6, 232
 Aldehyde C-10, 190
 aldehydes, 1, 22-24, 26-30
 alfa-n-amylene, 296
 Algylen, 306
 aliphatic alcohols, 3, 4
 aliphatic amines, 1
 aliphatic hydrocarbons, 1, 74-83, 128
 alkenals, 23
 alkyd resins, 4
 alkylates, 254
 allyl alcohol, 6, 154
 allyl chlorocarbonate, 154
 allyl chloroformate, 154
 alpha-aminotoluene, 163
 alpha-bromotoluene, 164
 alpha-butylene oxide, 175
 alpha-chlorotoluene, 164
 alpha-decene, 191
 alpha-dodecylene, 227
 alpha-furylcarbinol, 251
 alpha-hexene, 261
 alpha-hydroxytoluene, 162
 alpha-oxodiphenylmethane, 160
 alpha-oxoditane, 160
 amines, 31-34
 aminobenzene, 156
 aminoethane, 233
 amyl acetate, 155
 amylcarbinol, 260
 anesthesia ether, 241
 aniline oil, 156
 aniline, 156
 anilinomethane, 279
 anisoyl chloride, 157
 Anol, 187
 Anone, 188
 Arcton 9, 307
 aromatic alcoholic solvents, 3
 aromatic hydrocarbons, 1, 74-83
 azacycloheptane, 258
 azanaphthalene, 301
 azeotrope, 5, 13
 azirane, 250
 aziridine, 250
 benzaldehyde, 158
 benzazine, 301
 benzene, 13, 158
 benzenecarbinol, 162
 benzenecarbonyl chloride, 161
 benzinofom, 180
 benzo(b)pyridine, 301
 benzoic acid nitrile, 159
 benzoic aldehyde, 158
 benzol, 158
 benzole, 158
 benzonitrile, 159
 benzophenone, 160
 benzoyl chloride, 161
 benzoylbenzene, 160
 benzyl alcohol, 3, 6, 162
 benzyl bromide, 164
 benzyl chloride, 164

- benzyl chlorocarbonate, 166
- benzyl chloroformate, 166
- benzyl ester, 166
- benzylamine, 163
- benzylcarbonyl chloride, 166
- bis(2-aminoethyl)amine, 212
- bis(2-chloroethyl) ether, 201
- bis(2-ethylhexyl) ester, 222
- bis(2-ethylhexyl) phthalate, 222
- bis(8-methylnonyl)ester, 215
- blue oil, 156
- bromobenzene, 167
- bromobenzol, 167
- bromotoluene, alpha, 164
- butanal, 179
- butanol, 19, 171
- butanone, 283
- butene resins, 297
- butoxydiethylene glycol, 209
- butoxydiglycol, 209
- butoxyethyl 2,4-dichlorophenoxyacetate, 193
- butoxyethyl ester, 193
- butyl "Carbitol" acetate, 209-210
- butyl 2-methacrylate, 177
- butyl 2-methyl-2-propenoate, 177
- butyl 2-propenoate, 170
- butyl acetate, 167
- butyl acrylate, 170
- butyl alcohol, 19, 171, 264
- butyl aldehyde, 179
- butyl Cellosolve, 247
- butyl ester, 167, 170, 177
- butyl ethanoate, 167
- butyl ether, 196
- butyl methacrylate, 177
- butylamine, 173
- butylene hydrate, 171
- butylene oxide, 175
- butyraldehyde, 179
- butyric acid, 235
- butyric aldehyde, 179
- butyric ether, 235
- C-10 alcohol, 191
- capraldehyde, 190
- capric alcohol, 191
- capric aldehyde, 190
- caproaldehyde, 258
- caproic aldehyde, 258
- capronaldehyde, 258
- Carbitol, 211
- carbobenzoxy chloride, 166
- carbolic oil, 179
- carbon tetrachloride, 68-70, 180
- carbonic acid diethyl ester, 207
- catalytic oxidation of methanol, 12
- catalytic oxidation, 12
- cellophane films, 4
- Cellosolve, 248
- chemical industry processes, 1
- Chinoline, 301
- chloracetic acid, 237
- Chloretane, 236
- Chlorex, 201
- chlorobenzene, 70-71
- chlorocarbonic acid, methyl ester, 281
- chloroform, 67-68, 181
- chloroformic acid, 166, 237, 281
- chloromethyloxirane, 229
- chlorotoluene, alpha, 164
- Clean Air Act, 95-103
- Clorilen, 306
- coal tar, 183
- coating formulations, 6
- cod oil, 295
- cologne spirit, 232
- Colonial spirit, 277
- Columbian spirit, 277
- Community Right-To-Know Act, 95, 104
- copper naphthenate, 182
- creosote, 183
- cresols, 184
- cresote oil, 183
- cresylic acids, 184
- Croplas EH, 243
- Cumene, 184
- Cumol, 184

- cyanobenzene, 159
cyclic alcoholic solvents, 3
cyclohexane, 186
cyclohexanol, 3, 4, 6, 187
cyclohexanone, 188
cyclohexyl alcohol, 187
cyclopentane, 188, 282
Cymol, 185
- DCEE, 201
dead oil, 183
decahydronaphthalene, 189
decaldehyde, 190
Decalin, 189
Decanal, 190
decane, 189
decarbonylation, 20
decene, 191
decyl alcohol, 6
decylbenzene, 192
dehydration, 18
dehydrogenation, 12
DEN, 206
denatured alcohol, 232
denaturing, 18
dextrose, 17
D-glucitol, 302
di-(2-chloroethyl) ether, 201
di(2-ethylhexyl) Adipate, 221
di(2-ethylhexyl) phthalate, 222
diacetic ether, 230
diacetone alcohol, 6, 194
diamyl ester, 194
diamyl phthalate, 194
di-beta-hydroxyethoxy-ethane, 312
DIBK, 214
dibutyl ether, 196
dibutyl oxide, 196
dibutylamine, 195
dichloride, 198
dichlorobenzene, 71-72
dichlorobutene, 199
dichlorodiethyl ether, 201
dichloroethylene, 199
dichloromethane, 202
dichloropropane, 203
dichloropropene, 204
dicyclopentadiene, 205
diethanolamine, 205
diethyl carbonate, 207
diethyl ether, 15
diethylamine, 206
diethylbenzene, 207
diethylene glycol dimethyl ether, 209
diethylene glycol ethyl ether, 211
diethylene glycol monoethyl ether, 211
diethylene glycol, 208
diethyleneglycol monobutyl ether acetate, 209-210
diethylenetriamine, 212
diethyl ether, 241
diethyl oxide, 241
diglycol monobutyl ether acetate, 210
diglycol monobutyl ether, 209
diglycol, 208
diheptyl ester, 212
diheptyl phthalate, 212
dihydroxydiethyl ether, 208
diisobutyl ketone, 214
diisobutylcarbinol, 213
diisobutylene, 214
diisodecyl ester, 215
diisodecyl phthalate, 215
diisopropanolamine, 216
diisopropyl ester, 273
diisopropyl ether, 271
diisopropyl oxide, 271
diisopropyl percarbonate, 273
diisopropyl peroxydicarbonate, 273
diisopropylamine, 217
dimethoxymethane, 284
dimethyl ether, 218
dimethyl sulfate, 218
dimethyl sulfide, 219
dimethyl sulfoxide, 220
dimethylcarbinol, 269
dimethylformal, 284
di-n-amyl phthalate, 194

- di-n-butyl ether, 196
- di-n-butyl ketone, 197
- di-n-butylamine, 195
- dioctyl adipate, 221
- dioctyl phthalate, 222
- dipentene, 222
- dipentyl ester, 194
- dipentyl phthalate, 194
- diphenyl ether, 223
- diphenyl ketone, 160
- diphenyl methanone, 160
- diphenyl oxide, 223
- dipropylene glycol, 224
- distillates, flashed feed stocks, 225
- distillation, 16, 18
- DMS, 219
- DMSO, 92, 220
- DOA, 221
- dodecanol, 225, 274
- dodecene, 226, 227
- dodecyl alcohol, 225
- dodecyltrichlorosilane, 228
- DOP, 222
- Dovanol EM, 249
- Dovonol EB Glycol Butyl Ether, 247
- Dowanol DB, 209
- Dowanol DE, 211
- Dowanol EE, 248
- Downtherm E, 197
- dyes, 9
- Dytol S-91, 191
- EB, 233
- Ektasolve DB Acetate, 210
- elastomers, 10
- electropositive metals, 4
- enanthic alcohol, 256
- epichlorohydrin, 229
- epoxypropane, 300
- Eskimon 11, 307
- esterification, 4
- esters, 1, 34-38
- ethanethiol, 245
- ethanoic acid, 149
- ethanoic anhydride, 149
- ethanol plants, 18
- ethanol, 3-6, 13, 14, 15, 17, 232
- ethers, 1, 38-46
- ethoxy diglycol, 211
- ethoxyethane, 241
- ethyl acetate, 229
- ethyl acetoacetate, 230
- ethyl acrylate, 231
- ethyl alcohol, 15, 232
- ethyl alpha-hydroxy-propionate, 244
- ethyl alpha-methylmethacrylate, 246
- ethyl butanoate, 235
- ethyl butanol, 234
- ethyl butyrate, 235
- ethyl carbonate, 207
- ethyl cellulose, 9
- ethyl chloracetate, 237
- ethyl chloride, 236
- ethyl chloroacetate, 237
- ethyl chloroethanoate, 237
- ethyl chloroformate, 237
- Ethyl DL-Lactate, 244
- ethyl ester, 229, 230, 231, 235, 237, 243, 244, 246, 241
- ethyl formate, 243
- ethyl formic ester, 243
- ethyl hexanol, 242
- ethyl hexyl tallate, 243
- ethyl lactate, 244
- ethyl mercaptan, 245
- ethyl methacrylate, 246
- ethyl methacrylate-inhibited, 246
- ethyl methanoate, 243
- ethyl methyl ketone, 283
- ethyl nitrite, 246
- ethyl sulfhydrylate, 245
- ethylamine, 233
- ethylbenzene, 233
- ethylcarbinol, 299
- ethyldichlorosilane, 238
- ethylene chlorhydrin, 239
- ethylene dichloride, 72-73
- ethylene glycol dihydroxydiethyl ether, 312
- ethylene glycol ethyl ether, 248

- ethylene glycol monobutyl ether, 247, 248, 249
ethylene glycol, 4
ethylene oxide, 21
ethylenediamine, 240
ethyleneimine, 250
ethylhexyl alcohol, 242
ethylidene dichloride, 73-74
Eufin, 207
Exxsol solvents, 81
- fermentation alcohol, 232, 262
fermentation, 15, 17
fiberglass-reinforced plastic, 20
formaldehyde dimethylacetate, 284
formaldehyde, 9-10, 12, 250
formalin, 250
formalith, methanal, 250
formic acid, 243
formic acid, methyl ester, 285
formic aldehyde, 250
formic ether, 243
Freon 11, 307
Frigen 11, 307
fuel oil, 274
Fumigrain, 152
furan resins, 20
furan, 20
furancarbinol, 251
furane resins, 20
furfuralcohol, 251
furfuryl alcohol derivatives, 20
furfuryl alcohol urea, 20
furfuryl alcohol, 6, 20, 251
furfuryl alcohol-based resins, 20
furfuryl amine, 20
furniture finishes, 20
furyl carbinol, 20
fusel oil, 262
Fyde, 250
- gamma-chloropropylene oxide, 229
gas oil, 252
gasoline blending stocks, 254
gasolines, 253
- Gemalgene, 306
Genetron 11, 307
glacial acetic acid, 149
glycerine, 255
glycerol, 4, 21, 255
glycol chlorohydrin, 239
glycol ethers, 1, 46-51
glycol monoethyl ether, 248, 249
glycols, 21
grain alcohol, 232
gum turpentine, 312
- halogenated hydrocarbons, 1, 51-74
Hansen solubility parameters, 134-141
Hansen solubility theory, 131-133
Hazardous and Solid Waste Amendments, 119-120
heat of reaction, 12
hendecanoic alcohol, 313
hendecanol, 313
hendecylenic alcohol, 313
heptane, 255
heptanol, 256
heptene, 257
heptyl alcohol, 256
heptylcarbinol, 293
heptylene, 257
heterocyclic amines, 1
hexahydric alcohol, 302
hexahydroazepine, 258
hexahydrobenzene, 186
hexahydrophenol, 187
hexalin, 187
hexamethylene, 186
hexamethyleneimine, 258
hexanal, 258
hexanaphthene, 186
hexane, 259
hexanol, 260
hexanone, 280
hexene, 261
hexone, 287
hexyl acetate, 278
hexyl alcohol, 260

- hexylene glycol, 261
- homopiperidine, 258
- hot spray lacquers, 20
- hydration, 15
- hydrogen bonds, 3
- Hydrosol series, 76-80
- hydroxycyclohexane, 187
- hydroxyheptane, 256
- hydroxyhexane, 260
- hydroxyl functional group, 3
- hydroxymethylfuran, 251
- hydroxytoluenes, 184
- Hylene T, 304
- Hytrol O, 188

- illuminating oil, 274
- intermolecular bonds, 3
- Isceon 11, 307
- isoamyl alcohol, 4-6, 262
- isobutanol, 5-6, 264
- isobutenyl methyl ketone, 275
- isobutyl acetate, 263
- iso-butyl acrylate, 169
- isobutyl alcohol, 4, 264
- isobutyl ester, 169, 263
- isobutyl methyl carbinol, 286
- isobutyl methyl ketone, 287
- isobutyl methylmethanol, 278
- isobutylaldehyde, 178
- isobutylamine, 265
- isobutylcarbinol, 262
- isobutylmethyl carbinol, 278
- isobutyraldehyde, 178
- isobutyric aldehyde, 178
- isodecyl alcohol, 265
- isohexane, 266
- isooctanol, 4
- isooctyl alcohol, 262, 267
- isophorone, 268
- isopropanol, 4, 269
- isopropenyl methyl ketone, 288
- isopropyl 2,4-dichlorophenoxy acetate, 193
- isopropyl acetate, 268
- isopropyl alcohol, 6, 269
- isopropyl ester, 193, 268
- isopropyl ether, 271
- isopropyl mercaptan, 272
- isopropyl percarbonate, 273
- isopropyl peroxydicarbonate, 273
- isopropylacetone, 287
- isopropylamine, 270
- isopropylcarbinol, 264
- isopropylideneacetone, 275
- isotridecanol, 308
- isotridecyl alcohol, 308
- Isotron 11, 307
- Isovalerone, 214

- kerosene, 1, 83-91, 274

- lacquers, 20
- lactic acid, 244
- lauryl alcohol, 225
- Leucol, 301
- levulic acid, 20
- Limonene, 222
- linear alcohols, 274
- liquefaction, 17
- liquefied phenol, 179
- liquid petrolatum, 294
- Lorol-22, 191

- MAAc, 278
- MAOH, 278
- MAOH, 286
- MEK, 86, 283
- mercaptoethane, 245
- mesityl oxide, 275
- metal ethoxide, 15
- metal-catalyzed hydrogenation, 20
- methacrylic acid, 177, 246
- methanethiomethane, 219
- methanol, 3-9, 12, 277
- methanol-based windshield antifreeze, 9
- methyl acetate, 276
- methyl alcohol, 10, 277, 286
- methyl amyl acetate, 278
- methyl amyl alcohol, 278

- n*-hexaldehyde, 258
- n*-hexyl alcohol, 6
- n*-hexyl, 5
- nitrocellulose, 9
- nitroparaffins, 1
- nitrous ether, 246
- n*-methylaminobenzene, 279
- n*-methylaniline, 279
- n*-octane, 292
- n*-octyl alcohol, 6
- nonanol, 289
- nonene, 290, 291
- nonilalcohol, 289
- nonyl alcohol, 6
- nonylcarbinol, 191
- nonylene, 291
- nonylethylene, 314
- nonylphenol, 291
- norvalamine, 173
- n*-propanol, 18
- n*-propyl acetate, 299
- n*-propyl alcohol, 5-6, 18, 299
- n*-propylcarbinol, 171
- n*-undecylbenzene, 315

- octane enhancement, 8
- octane, 292
- octanol, 293
- Octoil, 222
- octyl alcohol, 293
- octylcarbinol, 289
- o*-dichlorobenzene, 197
- oil of bitter almond, 158
- oils, 294-295
- oleates, 19
- omega-bromotoluene, 164
- omega-chlorotoluene, 164
- o*-methylaniline, 305
- organic chemicals, 1
- organic liquids, 1
- oriented strandboard (OSB), 9
- orthodichlorobenzene, 197
- OSHA legislation, 1
- OSHA, 95, 122-126
- o*-toluidine, 305

- o*-xylene, 317
- oxytoluenes, 184

- paint drier, 182
- Paradi, 198
- paradichlorobenzene, 198
- Paradow, 198
- Paramoth, 198
- particle board, 9
- p*-cumene, 185
- p*-dichlorobenzene, 198
- pelargonic alcohol, 289
- pentadecanol, 274
- pentamethylene, 188
- pentyl acetates, 155
- perchloroethylene, 61-63
- perchloromethane, 180
- perhydronaphthlene, 189
- peroxydicarbonic acid, 273
- Petrohol, 269
- petrol, 253
- petroleum distillate, 225
- petroleum spirits, 288
- Phellandrene, 222
- phenoxybenzene, 223
- phenyl bromide, 167
- phenyl ether, 223
- phenylamine, 156
- phenylcarbinol, 162
- phenylcyanide, 159
- phenylethane, 233
- phenylmethanol, 162
- phenylmethyl alcohol, 162
- phenylmethyl amine, 163
- phosphorus pentachloride, 4
- phthalates, 19
- phthalic acid, 194, 212, 215, 222
- physical properties, 7
- pimelic ketone, 188
- p*-isopropyltoluene, 185
- plasticizer DDP, 215
- plasticizer-type esters, 19
- plastics, 4, 9
- pluracol polyol, 298
- Poli-Solv EE, 248

- polybutene, 297
- polyethylene glycol (PEG) , 21
- polyhydric alcohols, 1, 21-22
- polyisobutylene plastics, 297
- polyisobutylene resins, 297
- polyisobutylene waxes, 297
- polymer compositions, 6
- polyoxipropylene ether, PPG, 298
- polyoxipropylene glycol, 298
- polypropylene glycols P400 to P4000, 298
- polypropylene glycol, 298
- Poly-Solv DB, 209
- Poly-Solv DE, 211
- Poly-Solv EB, 247
- Poly-Solv EM, 249
- polyvinyl acetate, 9
- potato-spirit oil, 262
- propanoic anhydride, 299
- propanol, 3, 299
- propenamide, 151
- propionyl oxide, 299
- propyl alcohol, 18, 299
- propyl ester, 299
- propylene dichloride, 203
- propylene oxide, 300
- propylene tetramer, 226
- propylene trimer, 290
- propylethylene, 296
- pseudohexyl alcohol, 234
- p*-xylene, 318
- quinoline, 301
- range oil, 274
- RCRA, 115-119
- reportable quantities, 104-115
- resin, 6, 295
- Retinol, 295
- rosin oil, 295
- Rosinol, 295
- rubbing alcohol, 269
- saccharification, 17
- Santochlor, 198
- SARA Title III, 103-115
- sec*-amyl alcohol, 5-6
- sec*-butanol, 5-6
- sec*-butyl acetate, 168
- sec*-butyl alcohol, 171
- sec*-butyl ester, 168
- sec*-butylamine , 174
- sec*-hexyl alcohol, 234
- sec*-octyl alcohol, 6
- sec*-pentyl carbinol, 234
- sec*-propyl alcohol, 269
- sextone, 188
- shellacs, 9
- silicochloroform, 307
- sodium alkyl sulfates, 302
- sodium hydrogen alkyl sulfate, 302
- sodium, 4
- solubility data, 8
- solvent blends, 133-134
- solvent, definition of, 1
- Sorbitol, 302
- spirit of ether nitrite, 246
- spirit, 232
- spirits of turpentine, 312
- spirits of wine, 232
- stearates, 19
- straight chain alcohols, 3
- sulfate turpentine, 312
- sulfuric acid, 15
- sulfuric ether, 241
- surface tension, 6
- tar acids, 184
- TBA, 175
- TDE, 304
- TEG, 312
- Telone, 204
- ternary azeotrope, 13
- Terpinene, 222
- Terpodiene, 222
- tert*-amyl alcohol, 5
- tert*-amyl alcohol, 6
- tert*-butanol, 5- 6
- tert*-butyl alcohol , 172
- tert*-butylamine, 175

- tertiary butyl alcohol, 6
tetrachloromethane, 180
tetradecanol, 274
tetrahydrofurfuryl alcohol, 6, 20
tetrapropylene, 226
Thanol PPG, 298
thinners, 20
thiobutyl alcohol, 176, 245
Threthylene, 306
toluene 2,4-diisocyanate, 304
toluene, 303
Toluol, 303
Toxic Substance Control Act, 121-122
Trethylene, 306
trichloroethylene, 57-61, 306
trichlorofluoromethane, 307
trichloromethane, 181
trichloromonosilane, 307
trichlorosilane, 307
TriClene, 306
Tridecanol, 274, 308
Tridecene, 308
Trielene, 306
triethanolamine, 310
triethylbenzene, 311
triethylene glycol, 312
Triglycol, 312
Trihloran, 306
Trihloroethelene, 306
trihydric alcohols, 4
trihydroxypropane, 255
trihydroxytriethylamine, 310
Triline, 306
Trimar, 306
trimethylaminomethane, 175
trimethylcarbinol, 172
tripropylene, 290
tris(hydroxyethy)amine, 310
tungstic acid, 15
turpentine, 312
Turps, 312
Tyranton, 194
undecanol, 313
undecene, 314
undecyl alcohol, 313
undecylethylene, 308
undecylic alcohol, 313
underground storage tanks, 120
urea formaldehyde resins (UF), 9
urethane foams, 10
US EPA, 8
vinegar acid, 149
vinyl cyanide, 152
vinyltoluene, 315
water, 93-94
water-treatment chemicals, 9
white oil, 294
wood alcohol, 277
wood ether, 218
wood naphtha, 277
wood spirit, 277
wood turpentine, 312
xylenol, 319
xylol, 316
yeast, 17
Ucon 11, 307