

TGA Vapor-Phase FT-IR Spectral Library

Index of Compounds

<u>No.</u>	<u>Compound Description</u>	<u>No.</u>	<u>Compound Description</u>
219	Acetaldehyde	60	1,3-Butadiene
328	Acetamide	222	Butanal
229	Acetic acid	4	Butane
321	Acetic anhydride	139	1,3-Butanediol
293	Acetin	138	1,4-Butanediol
210	Acetone	140	2,3-Butanediol
342	Acetonitrile	179	1-Butanethiol
322	Acetyl chloride	231	Butanoic acid
447	Acetylene	132	t-Butanol
225	Acrolein	117	1-Butanol
330	Acrylamide	126	2-Butanol
245	Acrylic acid	211	2-Butanone
346	Acrylonitrile	227	2-Butenal
59	Allene	28	1-Butene
142	Allyl alcohol	33	(E)-2-Butene
388	Allylbenzene	246	2-Butenoic acid
356	Allyl isocyanate	247	3-Butenoic acid
183	Allyl mercaptan	143	(E)-2-Buten-1-ol
192	2-Aminobutane	144	3-Buten-1-ol
340	6-Aminohexanoic acid lactam	163	2-Butoxyethanol
193	1-Amino-2-methylpropane	260	Butyl acetate
191	2-Aminopropane	302	Butyl acrylate
448	Ammonia	117	Butyl alcohol
261	Amyl acetate	188	Butylamine
118	Amyl alcohol	194	t-Butylamine
189	Amylamine	192	2-Butylamine
180	Amyl mercaptan	373	Butylbenzene
411	Aniline	376	t-Butylbenzene
395	Anthracene	374	(2-Butyl)benzene
418	Benzaldehyde	150	Butyl ether
369	Benzene	353	Butyl isocyanate
411	Benzeneamine	354	t-Butyl isocyanate
409	Benzenethiol	179	Butyl mercaptan
419	Benzoic acid	306	Butyl methacrylate
438	Benzonitrile	151	t-Butyl methyl ether
408	Benzyl alcohol	306	Butyl 2-methylpropenoate
431	Benzyl butyl phthalate	367	Butyl phosphate
410	Benzyl mercaptan	302	Butyl propenoate
406	BHT	222	Butyraldehyde
392	Biphenyl	231	Butyric acid
317	Bis(2-butoxyethyl) adipate	294	Butyryn
317	Bis(2-butoxyethyl) hexanedioate	344	Butyronitrile
434	Bis(2-butoxyethyl) phthalate	324	Butyryl chloride
433	Bis(2-ethoxyethyl) phthalate	441	Caffeine
289	Bis(2-ethylhexyl) adipate	224	Caproaldehyde
269	Bis(2-ethylhexyl) carbonate	233	Caproic acid
289	Bis(2-ethylhexyl) hexanedioate	340	e-Caprolactam
166	1,2-Bis(2-hydroxyethoxy)ethane	234	Caprylic acid
156	1,2-Bis(2-methoxyethoxy)ethane	319	Carbon dioxide
157	Bis(2-(2-methoxyethoxy)ethyl) ether	320	Carbon disulfide
432	Bis(2-methoxyethyl) phthalate	318	Carbon monoxide
407	Bisphenol A	96	Carbon tetrachloride
60	Bivinyll	326	Carbonyl dichloride
398	Bromobenzene	95	CFC-11
171	1-Bromo-2,3-epoxypropane	94	CFC-12
81	Bromoethane	93	CFC-13
105	Bromoethylene	90	CFC-21
78	Bromomethane	89	CFC-22
84	2-Bromopropane	88	CFC-23

<u>No.</u>	<u>Compound Description</u>	<u>No.</u>	<u>Compound Description</u>
102	CFC-113b	85	Dichloromethane
100	CFC-114	87	1,2-Dichloropropane
99	CFC-115	100	1,2-Dichlorotetrafluoroethane
98	CFC-116	97	1,1-Dichloro-2,2,2-trifluoroethane
97	CFC-123	153	1,2-Diethoxyethane
111	CFC-1113	336	N,N-Diethylacetamide
110	CFC-1114	286	Diethyl adipate
106	CFC-1132	197	Diethylamine
103	CFC-1141	200	2-(Diethylamino)ethanol
397	Chlorobenzene	280	Diethyl butylmalonate
89	Chlorodifluoromethane	268	Diethyl carbonate
170	1-Chloro-2,3-epoxypropane	279	Diethyl diethylmalonate
80	Chloroethane	162	Diethylene glycol
104	Chloroethylene	155	Diethylene glycol diethyl ether
91	Chloroform	154	Diethylene glycol dimethyl ether
77	Chloromethane	165	Diethylene glycol monoethyl ether
99	Chloropentafluoroethane	164	Diethylene glycol monomethyl ether
83	2-Chloropropane	200	N,N-Diethylethanolamine
111	Chlorotrifluoroethylene	147	Diethyl ether
93	Chlorotrifluoromethane	278	Diethyl ethylmalonate
403	m-Cresol	334	N,N-Diethylformamide
402	o-Cresol	311	Diethyl fumarate
404	p-Cresol	284	Diethyl glutarate
227	Crotonaldehyde	286	Diethyl hexanedioate
246	Crotonic acid	214	Diethyl ketone
143	Crotyl alcohol	310	Diethyl maleate
70	Cyclohexane	274	Diethyl malonate
184	Cyclohexanethiol	277	Diethyl methylmalonate
145	Cyclohexanol	271	Diethyl oxalate
217	Cyclohexanone	284	Diethyl pentanedioate
74	Cyclohexene	424	Diethyl phthalate
145	Cyclohexyl alcohol	282	Diethyl succinate
355	Cyclohexyl isocyanate	106	1,1-Difluoroethylene
184	Cyclohexyl mercaptan	437	1,3-Dihydro-1,3-dioxoisobenzofuran
69	Cyclopentane	288	Diisobutyl adipate
73	Decahydronaphthalene, cis + trans	288	Diisobutyl hexanedioate
73	Decalin, cis + trans	428	Diisobutyl phthalate
10	Decane	149	Diisopropyl ether
123	1-Decanol	426	Diisopropyl phthalate
32	1-Decene	152	1,2-Dimethoxyethane
123	Decyl alcohol	159	Dimethoxymethane
454	Deuterium oxide	335	N,N-Dimethylacetamide
292	1,2-Diacetoxyethane	285	Dimethyl adipate
430	Diallyl phthalate	196	Dimethylamine
436	Diallyl terephthalate	413	N,N-Dimethylaniline
195	1,2-Diaminoethane	377	1,2-Dimethylbenzene
101	1,2-Dibromotetrafluoroethane	378	1,3-Dimethylbenzene
291	Dibutyl decanedioate	379	1,4-Dimethylbenzene
150	Dibutyl ether	21	2,2-Dimethylbutane
313	Dibutyl fumarate	22	2,3-Dimethylbutane
312	Dibutyl maleate	55	2,3-Dimethyl-1-butene
275	Dibutyl malonate	57	2,3-Dimethyl-2-butene
276	Di-t-butyl malonate	56	3,3-Dimethyl-1-butene
406	2,6-Di-t-butyl-4-methylphenol	309	Dimethyl (E)-2-butenedioate
272	Dibutyl oxalate	308	Dimethyl (Z)-2-butenedioate
405	2,6-Di-t-butylphenol	239	2,2-Dimethylbutyric acid
427	Dibutyl phthalate	240	3,3-Dimethylbutyric acid
435	Dibutyl O-(phthaloyl)glycolate	267	Dimethyl carbonate
291	Dibutyl sebacate	290	Dimethyl decanedioate
399	1,2-Dichlorobenzene	194	1,1-Dimethylethylamine
400	1,4-Dichlorobenzene	333	N,N-Dimethylformamide
94	Dichlorodifluoromethane	309	Dimethyl fumarate
86	1,2-Dichloroethane	283	Dimethyl glutarate
107	1,1-Dichloroethylene	24	2,5-Dimethylhexane
108	(E)-1,2-Dichloroethylene	285	Dimethyl hexanedioate
90	Dichlorofluoromethane	308	Dimethyl maleate

<u>No.</u>	<u>Compound Description</u>	<u>No.</u>	<u>Compound Description</u>
273	Dimethyl malonate	266	Ethyl 2-methylpropanoate
151	1,1-Dimethyl-1-methoxyethane	305	Ethyl 2-methylpropenoate
270	Dimethyl oxalate	20	3-Ethylpentane
23	2,2-Dimethylpentane	301	Ethyl propenoate
283	Dimethyl pentanedioate	264	Ethyl propionate
58	2,4-Dimethyl-1-pentene	158	Ethyl vinyl ether
423	Dimethyl phthalate	447	Ethyne
136	2,2-Dimethyl-1,3-propanediol	103	Fluoroethylene
290	Dimethyl sebacate	88	Fluoroform
281	Dimethyl succinate	76	Fluoromethane
358	Dimethyl sulfone	95	Fluorotrichloromethane
357	Dimethyl sulfoxide	218	Formaldehyde
450	Dinitrogen monoxide	159	Formaldehyde dimethyl acetal
175	1,4-Dioxane	218	Formalin
429	Dipentyl phthalate	327	Formamide
287	Dipropyl adipate	228	Formic acid
148	Dipropyl ether	440	2-Furaldehyde
287	Dipropyl hexanedioate	440	Furan-2-carboxaldehyde
425	Dipropyl phthalate	440	Furfural
11	Dodecane	146	Glycerine
384	Durene	146	Glycerol
15	Eicosane	315	1-Glyceryl monoacetate
171	Epibromohydrin	293	Glyceryl triacetate
170	Epichlorohydrin	294	Glyceryl tributyrate
169	1,2-Epoxybutane	172	Glycidol
168	1,2-Epoxypropane	171	Glycidyl bromide
172	2,3-Epoxy-1-propanol	170	Glycidyl chloride
219	Ethanal	7	Heptane
2	Ethane	120	1-Heptanol
134	1,2-Ethanediol	130	2-Heptanol
177	Ethanethiol	31	1-Heptene
229	Ethanoic acid	37	(E)-3-Heptene
115	Ethanol	120	Heptyl alcohol
26	Ethene	113	Hexachloro-1,3-butadiene
147	Ether	13	Hexadecane
161	2-Ethoxyethanol	63	1,4-Hexadiene, (E) + (Z)
158	Ethoxyethene	64	(E,E)-2,4-Hexadiene
165	2-(2-Ethoxyethoxy)ethanol	98	Hexafluoroethane
155	2-Ethoxyethyl ether	368	Hexamethylphosphoric triamide
257	Ethyl acetate	364	Hexamethylphosphorous triamide
301	Ethyl acrylate	224	Hexanal
115	Ethyl alcohol	6	Hexane
186	Ethylamine	181	1-Hexanethiol
371	Ethylbenzene	233	Hexanoic acid
81	Ethyl bromide	119	1-Hexanol
45	2-Ethyl-1-butene	129	2-Hexanol
241	2-Ethylbutyric acid	30	1-Hexene
337	Ethyl carbamate	35	(E)-2-Hexene
80	Ethyl chloride	36	(E)-3-Hexene
343	Ethyl cyanide	262	Hexyl acetate
72	Ethylcyclohexane	119	Hexyl alcohol
26	Ethylene	190	Hexylamine
195	Ethylenediamine	181	Hexyl mercaptan
86	Ethylene dichloride	449	Hydrazine
134	Ethylene glycol	460	Hydrogen bromide
292	Ethylene glycol diacetate	459	Hydrogen chloride
153	Ethylene glycol diethyl ether	341	Hydrogen cyanide
152	Ethylene glycol dimethyl ether	455	Hydrogen fluoride
167	Ethylene oxide	456	Hydrogen sulfide
147	Ethyl ether	420	2-Hydroxybenzoic acid
254	Ethyl formate	162	2-Hydroxyethyl ether
82	Ethyl iodide	316	2-Hydroxyethyl methacrylate
266	Ethyl isobutyrate	137	2-Hydroxymethyl-2-methyl-1,3-propanediol
350	Ethyl isocyanate	393	Indene
177	Ethyl mercaptan	82	Iodoethane
305	Ethyl methacrylate	79	Iodomethane

<u>No.</u>	<u>Compound Description</u>	<u>No.</u>	<u>Compound Description</u>
16	Isobutane	251	3-Methylcrotonic acid
42	Isobutene	342	Methyl cyanide
303	Isobutyl acrylate	71	Methylcyclohexane
124	Isobutyl alcohol	75	1-Methyl-1-cyclohexene
193	Isobutylamine	85	Methylene chloride
375	Isobutylbenzene	191	1-Methylethylamine
307	Isobutyl methacrylate	211	Methyl ethyl ketone
221	Isobutyraldehyde	76	Methyl fluoride
236	Isobutyric acid	331	N-Methylformamide
345	Isobutyronitrile	253	Methyl formate
325	Isobutyryl chloride	54	2-Methyl-1-heptene
244	Isocaproic acid	53	2-Methyl-1-hexene
348	Isocyanic acid	422	Methyl 2-hydroxybenzoate
383	Isodurene	79	Methyl iodide
18	Isohexane	216	Methyl isobutyl ketone
17	Isopentane	265	Methyl isobutyrate
66	Isoprene	349	Methyl isocyanate
386	Isopropenylbenzene	212	Methyl isopropyl ketone
259	Isopropyl acetate	176	Methyl mercaptan
125	Isopropyl alcohol	304	Methyl methacrylate
191	Isopropylamine	265	Methyl 2-methylpropanoate
84	Isopropyl bromide	304	Methyl 2-methylpropenoate
83	Isopropyl chloride	67	(E)-2-Methyl-1,3-pentadiene
345	Isopropyl cyanide	68	3-Methyl-1,3-pentadiene, (E) + (Z)
149	Isopropyl ether	18	2-Methylpentane
255	Isopropyl formate	19	3-Methylpentane
407	4,4'-Isopropylidenediphenol	242	2-Methylpentanoic acid
352	Isopropyl isocyanate	243	3-Methylpentanoic acid
182	Isopropyl mercaptan	244	4-Methylpentanoic acid
237	Isovaleric acid	215	3-Methyl-2-pentanone
382	Mesitylene	216	4-Methyl-2-pentanone
226	Methacrolein	47	2-Methyl-1-pentene
248	Methacrylic acid	50	2-Methyl-2-pentene
347	Methacrylonitrile	48	3-Methyl-1-pentene
1	Methane	51	3-Methyl-2-pentene, (E) + (Z)
176	Methanethiol	49	4-Methyl-1-pentene
114	Methanol	52	4-Methyl-2-pentene
160	2-Methoxyethanol	252	(E)-2-Methyl-2-pentenoic acid
164	2-(2-Methoxyethoxy)ethanol	402	2-Methylphenol
154	2-Methoxyethyl ether	403	3-Methylphenol
332	N-Methylacetamide	404	4-Methylphenol
256	Methyl acetate	221	2-Methylpropanal
300	Methyl acrylate	16	2-Methylpropane
159	Methylal	124	2-Methyl-1-propanol
114	Methyl alcohol	132	2-Methyl-2-propanol
185	Methylamine	226	2-Methylpropenal
412	N-Methylaniline	42	2-Methylpropene
414	2-Methylaniline	347	2-Methylpropenenitrile
415	3-Methylaniline	300	Methyl propenoate
416	4-Methylaniline	248	2-Methylpropenoic acid
370	Methylbenzene	263	Methyl propionate
421	Methyl benzoate	236	2-Methylpropionic acid
78	Methyl bromide	345	2-Methylpropionitrile
66	2-Methyl-1,3-butadiene	325	2-Methylpropionyl chloride
65	3-Methyl-1,2-butadiene	192	1-Methylpropylamine
17	2-Methylbutane	193	2-Methylpropylamine
133	2-Methyl-2-butanol	307	2-Methylpropyl 2-methylpropenoate
212	3-Methyl-2-butanone	303	2-Methylpropyl propenoate
43	2-Methyl-1-butene	443	2-Methylpyridine
46	2-Methyl-2-butene	444	3-Methylpyridine
44	3-Methyl-1-butene	445	4-Methylpyridine
250	(E)-2-Methyl-2-butenic acid	338	1-Methyl-2-pyrrolidinone
251	3-Methyl-2-butenic acid	422	Methyl salicylate
238	2-Methylbutyric acid	386	a-Methylstyrene
237	3-Methylbutyric acid	387	(E)-b-Methylstyrene
77	Methyl chloride	389	2-Methylstyrene

No. Compound Description

390	3-Methylstyrene
391	4-Methylstyrene
358	Methyl sulfone
357	Methyl sulfoxide
242	2-Methylvaleric acid
243	3-Methylvaleric acid
315	1-Monoacetin
205	Morpholine
394	Naphthalene
451	Nitric oxide
201	2,2',2''-Nitrilotriethanol
417	Nitrobenzene
207	Nitroethane
452	Nitrogen dioxide
206	Nitromethane
208	1-Nitropropane
209	2-Nitropropane
450	Nitrous oxide
9	Nonane
235	Nonanoic acid
122	1-Nonanol
39	(E)-2-Nonene
40	(E)-3-Nonene
41	4-Nonene, (E) + (Z)
122	Nonyl alcohol
14	Octadecane
8	Octane
234	Octanoic acid
121	1-Octanol
131	2-Octanol
38	(E)-3-Octene
121	Octyl alcohol
167	Oxirane
235	Pelargonic acid
61	(E)-1,3-Pentadiene
62	1,4-Pentadiene
223	Pentanal
5	Pentane
141	1,5-Pentanediol
180	1-Pentanethiol
232	Pentanoic acid
118	1-Pentanol
127	2-Pentanol
128	3-Pentanol
213	2-Pentanone
214	3-Pentanone
29	1-Pentene
34	2-Pentene, (E) + (Z)
249	(E)-2-Pentenoic acid
261	Pentyl acetate
189	Pentylamine
180	Pentyl mercaptan
396	Phenanthrene
401	Phenol
411	Phenylamine
439	Phenyl isocyanate
387	(E)-1-Phenylpropene
386	2-Phenylpropene
388	3-Phenylpropene
326	Phosgene
437	Phthalic anhydride
443	2-Picoline
444	3-Picoline
445	4-Picoline
204	Piperazine
203	Piperidine

No. Compound Description

339	2-Piperidone
61	(E)-Piperylene
59	Propadiene
220	Propanal
3	Propane
135	1,2-Propanediol
178	1-Propanethiol
182	2-Propanethiol
146	1,2,3-Propanetriol
230	Propanoic acid
116	1-Propanol
125	2-Propanol
210	2-Propanone
225	Propenal
27	Propene
183	2-Propene-1-thiol
330	Propenoamide
245	Propenoic acid
142	2-Propen-1-ol
387	(E)-Propenylbenzene
220	Propionaldehyde
329	Propionamide
230	Propionic acid
343	Propionitrile
323	Propionyl chloride
258	Propyl acetate
116	Propyl alcohol
187	Propylamine
372	Propylbenzene
344	Propyl cyanide
27	Propylene
135	Propylene glycol
168	Propylene oxide
148	Propyl ether
351	Propyl isocyanate
178	Propyl mercaptan
442	Pyridine
202	Pyrrolidine
420	Salicylic acid
251	Senecioic acid
385	Styrene
359	Sulfolane
457	Sulfur dioxide
458	Sulfur trioxide
112	Tetrachloroethylene
96	Tetrachloromethane
12	Tetradecane
157	Tetraethylene glycol dimethyl ether
110	Tetrafluoroethylene
173	Tetrahydrofuran
174	Tetrahydropyran
202	Tetrahydropyrrole
359	Tetrahydrothiophene-1,1-dioxide
383	1,2,3,5-Tetramethylbenzene
384	1,2,4,5-Tetramethylbenzene
359	Tetramethylene sulfone
409	Thiophenol
250	Tiglic acid
370	Toluene
410	a-Toluenethiol
415	m-Toluidine
414	o-Toluidine
416	p-Toluidine
293	Triacetin
296	Tributyl 2-acetoxy-1,2,3-propanetricarboxylate
296	Tributyl citrate acetate

<u>No.</u>	<u>Compound Description</u>	<u>No.</u>	<u>Compound Description</u>
367	Tributyl phosphate	360	Trimethyl phosphite
363	Tributyl phosphite	441	1,3,7-Trimethylxanthine
294	Tributylin	337	Urethane
92	1,1,1-Trichloroethane	223	Valeraldehyde
109	Trichloroethylene	232	Valeric acid
91	Trichloromethane	339	d-Valerolactam
102	1,1,2-Trichlorotrifluoroethane	297	Vinyl acetate
201	Triethanolamine	247	Vinylacetic acid
295	Triethyl 2-acetoxy-1,2,3-propanetricarboxylate	385	Vinylbenzene
199	Triethylamine	105	Vinyl bromide
314	Triethyl citrate	299	Vinyl butyrate
295	Triethyl citrate acetate	104	Vinyl chloride
166	Triethylene glycol	346	Vinyl cyanide
156	Triethylene glycol dimethyl ether	103	Vinyl fluoride
314	Triethyl 2-hydroxy-1,2,3-propanetricarboxylate	107	Vinylidene chloride
366	Triethyl phosphate	106	Vinylidene fluoride
361	Triethyl phosphite	298	Vinyl propionate
88	Trifluoromethane	446	4-Vinylpyridine
362	Triisopropyl phosphite	453	Water
198	Trimethylamine	454	Water-d2
380	1,2,3-Trimethylbenzene	378	m-Xylene
381	1,2,4-Trimethylbenzene	377	o-Xylene
382	1,3,5-Trimethylbenzene	379	p-Xylene
25	2,2,4-Trimethylpentane		
365	Trimethyl phosphate		