

SADTLER
INFRARED GRATING
COLLECTION

1980
CUMULATIVE
NUMERICAL
INDEX

NO. 1—59000

STANDARD
SPECTRA

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**1980
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NUMERICAL
INDEX**

No.1 - 59000



**STANDARD
SPECTRA**

Sadtler Research Laboratories

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INTRODUCTION

The 1980 Cumulative Numerical Index for Infrared Grating Standard Spectra applies to all compounds for which Sadtler Research Laboratories has issued infrared reference spectra through February, 1980. The entries for grating infrared spectra follow the series 1 through 38000 and 49001 through 59000. The spectra numbered in the intervening series 38001P through 48487P are previously published prism infrared spectra which are not available in the grating format and have been re-issued and renumbered in the Sadtler Standard Grating Spectra publication to provide maximum available data to the user of this collection. Thus the P suffix always indicates a renumbered prism spectrum.

This index also includes the spectrum numbers of the same compounds as published in the companion Sadtler publications of 59,000 infrared prism spectra, 48,000 ultraviolet spectra, 32,000 60 MHz nuclear magnetic resonance spectra and 7,000 carbon-13 NMR spectra.

In addition to Sadtler spectra, the column of this index titled NMR includes the reference number of spectra published by Varian Associates and JEOL (Japan Electron Optics Laboratory Co., Ltd.). The Varian numbers are preceded by the letter V and the JEOL numbers either by the symbol * representing 100 MHz spectra, the letter F for ^{19}F spectra and the letter J for 60 MHz spectra.

The inclusion of the reference spectrum numbers for a variety of instrumental techniques provides the user with the ability to rapidly locate all available spectral data for compound identification or characterization.

This index may also be used in conjunction with the corresponding Sadtler Standard Grating Spec-Finder[®] publication to identify the reference spectrum numbers located by that comparison technique or other computerized data search and comparison methods such as the IRIS[®] system. Space limitations prevent inclusion of cross-references to the collections of Raman spectra, 100 MHz nuclear magnetic resonance spectra, fluorescence spectra and infrared vapor phase spectra, therefore each of these publications contains its own individual set of indexes.

The naming of the chemical compounds in the Sadtler reference spectra collections closely follows the Chemical Abstracts (CA) system of nomenclature, whereby the parent name is assigned on the basis of a predefined order of functionality and the arrangement of substitutions to the parent compound in alphabetical order. Recently CA has revised its nomenclature system but the new alterations are not incorporated in the Sadtler indexes at this time. In addition to the systematized names, many cross-references to frequently used trivial names are also included in this index.

The infrared spectra of some compounds were run in various media or physical forms when this additional information was pertinent to spectroscopic identification. These alternative spectra are designated at the end of the name in the index entry by the following abbreviations:

B	--	Between Salts (neat)
C	--	Cell
F	--	Film
G	-	Gas
K	--	KBr
M	--	Mineral Oil Mull
S	--	Solution

Since the Sadtler indexing system is totally computerized, certain limitations are imposed in nomenclature symbolism. Deviations which appear in the printed index are as follows:

/	(slash)	-	Read as parenthesis, bracket, or brace
□	(lozenge)	-	Read as indication of superscripting (See last of the examples on this page)
PR		-	Read as "prime". Therefore 2PR is read as 2'.
*	(asterisk)	-	Also read as "prime"

Lack of provision for Greek letters, super or subscripts (except as noted above) or lower case letters causes the following changes from normal notation:

A	-	Read as a or α
B	-	Read as b or β
G	-	Read as g or γ
D	-	Read as d or δ
O	-	Read as o, ortho or oxygen
M	-	Read as m or meta
N	-	Read as normal or nitrogen
P	-	Read as p, para or phosphorus
S	-	Read as s (symmetrical) or sulfur
D & L	-	Still retain their original significance when used in conjunction with carbohydrates.

Some examples illustrating the variations to be encountered are shown below.

Chemical Abstracts System

s-Triazine, 4-amino-6-(p-bromoanilino)-1,2-dihydro-2,2-dimethyl-,

Benz[a]anthracene-7,12-dione

Chryseno[6,5-d]oxazole

Spiro[cyclopropane-1,9'-fluorene], 2-acetyl-,

Tricyclo[3.3.1.1^{3,7}]decane

Sadtler Index

S-TRIAZINE, 4-AMINO-6-/P-BROMOANILINO/-1,2-DIHYDRO-2,2-DIMETHYL-,

^a
BENZ/A/ANTHRACENE-7,12-DIONE

CHRYSENO/6,5-D/OXAZOLE

SPIRO/CYCLOPROPANE-1,9PR-FLUORENE/, 2-ACETYL-,

or

SPIRO/CYCLOPROPANE-1,9*FLUORENE/, 2-ACETYL-,

TRICYCLO/3.3.1.1^{3,7}/DECANE

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NAME	PRISM	GRATING	UV	NMR	C-13
PROPANE, 2-NITRO-	1	1	1	V 41	1601
BUTYL ALCOHOL, TERT-	2	2		10198	1602
BUTYL ALCOHOL, TERT-, /GAS/	2219	2		10198	1602
2-PROPANOL, 2-METHYL-	2	2		10198	1602
2-PROPANOL, 2-METHYL-, /GAS/	2219	2		10198	1602
ACETIC ACID, ETHYL ESTER	4	3		10291	401
ETHYL ACETATE	4	3		10291	401
ANILINE, N,N-DIMETHYL-	6	4	3	1	2
ETHANE, NITRO-	7	5	4	2	402
BENZYL CHLORIDE	8	6	5	3	3
TOLUENE, A-CHLORO-	8	6	5	3	3
2-PICOLINE	9	7	6	566	403
BROMOFORM	10	8		6375	1603
BROMOFORM K	11345	8		6375	1603
METHANE, TRIBROMO-	10	8		6375	1603
O-XYLENE	11	9	7	10199	4
BENZENE, NITRO-	12	10	8	4	1401
DODECANOIC ACID	14	11		10325	5
DODECANOIC ACID	8486	11		10325	
LAURIC ACID	14	11		10325	5
LAURIC ACID	8486	11		10325	
PYRIDINE	15	12	9	10200	1201
ISOBUTYL ALCOHOL	16	13		7219	801
PHTHALIC ACID, BIS/2-METHOXYETHYL/ ESTER	23	14	11	1120	6
FORMIC ACID	25	15		6653	2801
PHTHALIC ACID, BIS/2-BUTOXYETHYL/ ESTER	26	16	12	1399	1607
4-PICOLINE	31	17	13	887	8
3-PICOLINE	32	18	14	890	9
BENZENE, CHLORO-	34	19	16	714	1402
ETHANE, 1,2-DICHLORO-	35	20		7304	1609
P-DIOXANE	40	21		1193	11
P-DIOXIN, TETRAHYDRO-	40	21		1193	11
PROPANE, 1-NITRO-	43	22	20	10192	
2-PENTANONE, 4-METHYL-	44	23	21	10201	405
PHENYL SULFONE	53	24	26	17333	4001
METHANE, NITRO-	61	25	29	9146	4002
BENZENE, 1-CHLORO-2-ETHYL-	79	26	32	1111	1612
BENZENE, M-DINITRO-	81	27	33	10134	4004
BARBITURIC ACID, 5-SEC-BUTYL-5- ETHYL-, SODIUM DERIVATIVE	82	28			4608
BUTABARBITAL, SODIUM DERIVATIVE	82	28			4608
TOLUENE, O-CHLORO-	91	29	37	13	1614
3,4-PYRIDINEDIMETHANOL, 5-HYDROXY-6- METHYL-, HYDROCHLORIDE	92	30	38	17264	5001
3,4-PYRIDINEDIMETHANOL, 5-HYDROXY-6- METHYL-, HYDROCHLORIDE	8085	30	38	17264	5001
PYRIDOXINE, HYDROCHLORIDE	92	30	38	17264	5001
PYRIDOXINE, HYDROCHLORIDE	8085	30	38	17264	5001
PYRIDOXOL, HYDROCHLORIDE	92	30	38	17264	5001
PYRIDOXOL, HYDROCHLORIDE	8085	30	38	17264	5001
VITAMIN B6, HYDROCHLORIDE	92	30	38	17264	5001
VITAMIN B6, HYDROCHLORIDE	8085	30	38	17264	5001
4-HEPTANONE, 2,6-DIMETHYL-	99	31	39	10135	806
4-HEPTANONE, 2,6-DIMETHYL-	6230	31	39	10135	806
ACETOACETIC ACID, ETHYL ESTER	101	32	40	10321	1616
BUTYL PHOSPHITE	104	33		6655	
ETHYL PHOSPHITE	105	34		19891	4611
ETHYL PHOSPHITE	110	34		19891	2802
2-FURALDEHYDE	113	35	42	10203	1618
FURFURAL	113	35	42	10203	1618
FURFUROLE	113	35	42	10203	1618
2-CYCLOHEXEN-1-ONE, 3,5,5-TRIMETHYL-	122	36	44	7311	4612
ISOPHORONE	122	36	44	7311	4612
BUTYRIC ACID	125	37		7312	1801
2-FURANCARBOXYLIC ACID	126	38	46	10235	4614
2-FUROIC ACID	126	38	46	10235	4614
PYROMUCIC ACID	126	38	46	10235	4614
BUTYRIC ACID, 2-AMINO-4-/METHYL- THIO/-	131	39		13494	4615
METHIONINE	131	39		13494	4615
ACETURIC ACID	123	40		6658	4615
ACETURIC ACID	6490	40		6658	4616
GLYCINE, N-ACETYL-	133	40		6658	4616
GLYCINE, N-ACETYL-	6490	40		6658	4616
O-TOLUIC ACID	139	41	51	17	4618
M-TOLUIC ACID	140	42	52	18	4619
2-PENTANOL, 4-METHYL-, ACETATE	144	43		521	36
BENZENE, P-DICHLORO-	146	44	55	715	37
BENZOIC ACID, P-CHLORO-	147	45	56	10266	4621
BENZOIC ACID, P-CHLORO-, /KBR/	11200	45	56	10266	4621
ACETAMIDE, N-METHYL-2-PHENYL-	151	46	58	6359	4622

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NAME	PRISM	GRATING	UV	NMR	C-13
BENZENE, P-DIHYDROXY-,	153	47	60	10350	38
BENZENE, P-DIHYDROXY-,	13206	47	60	10350	38
P-BENZENEDIOL	153	47	60	10350	38
P-BENZENEDIOL	13206	47	60	10350	38
HYDROQUINOL	153	47	60	10350	38
HYDROQUINOL	13206	47	60	10350	38
HYDROQUINONE	153	47	60	10350	38
HYDROQUINONE	13206	47	60	10350	38
QUINOL	153	47	60	10350	38
QUINOL	13206	47	60	10350	38
ANILINE, N-/2-NAPHTHYL/-,	155	48	61	10206	4804
2-NAPHTHYLAMINE, N-PHENYL-,	155	48	61	10206	4804
ACETANILIDE	160	49	63	5235	4201
ACETIC ACID, ISOBUTYL ESTER	164	50		8590	39
CYCLOHEXANONE	166	51	65	10208	409
CINNAMIC ACID, METHYL ESTER	167	52	66	20	4624
3,5-PYRIDINEDICARBOXYLIC ACID	168	53	15733	6659	4625
1-OCTADECANOL	170	54		6360	4626
1-OCTADECANOL	19763	54		6360	4626
CYCLOPENTANONE	171	55	67	1195	42
2-THIOPHENECARBOXALDEHYDE	174	56	69	10165	43
THIOPHENE, 2-NITRO-,	177	57	71	31622	
ANILINE, N-/1-NAPHTHYL/-,	179	58	72	21	4628
1-NAPHTHYLAMINE, N-PHENYL-,	179	58	72	21	4628
CYCLOHEXANE	180	59		1196	1403
CYCLOHEXANE /VAPOR/	6607	59		1196	1403
ETHANE, 1,1,2,2-TETRACHLORO-,	182	60		10209	45
TOLUENE, M-NITRO-,	183	61	73	22	2002
ETHYLENE, TRICHLORO-,	185	62		9266	410
8-QUINOLINOL	187	63	76	24	4630
ETHANOL	188	64		16002	808
ETHANOL /AZEOTROPIC/	6407	64		16002	808
ETHYL ALCOHOL	188	64		16002	808
ETHYL ALCOHOL /AZEOTROPIC/	6407	64		16002	808
SPIRITS	188	64		16002	808
ISOPROPYL ALCOHOL	189	65		14604	47
2-PROPANOL	189	65		14604	47
PROPANE, 1-CHLORO-,	193	66		6660	
CYCLOHEXANE, METHYL-,	194	67		* 151	49
CYCLOHEXANE, METHYL-,	194	68		27	49
BENZENEPHOSPHINIC ACID	201	69	2285	6012	3601
BENZENEPHOSPHINIC ACID	8812	69	2285	6012	3601
PHOSPHINIC ACID, PHENYL-,	201	69	2285	6012	3601
PHOSPHINIC ACID, PHENYL-,	8812	69	2285	6012	3601
ANILINE, M-NITRO-,	205	70	80	13454	5801
ISOBORNEOL, ACETATE	207	71		524	2003
ANILINE, N,M-DIETHYL-,	216	72	83	716	412
ETHER, 2-CHLOROETHYL VINYL,	221	73		10136	54
TOLUENE, O-CHLORO-A,A,A-TRIFLUORO-,	225	74	85	10137	2401
TOLUENE, P-CHLORO-A,A,A-TRIFLUORO-,	226	75	86	1177	2004
TRIETHYLAMINE	227	76		29	55
ACETONE	233	77	89	9288	413
ACETONE	6309	77	89	9288	413
METHYL KETONE	6309	77	89	9288	413
2-PROPANONE	233	77	89	9288	413
2-PROPANONE	6309	77	89	9288	413
1-NAPHTHOIC ACID, 2-HYDROXY-,	234	78	90	13433	4634
1-NAPHTHOIC ACID, 2-HYDROXY-,	13209	78	90	13433	4634
ETHYLENE, TETRACHLORO-,	237	79			1812
TOLUENE, 4-CHLORO-3-NITRO-A,A,A-TRIFLUORO-,	238	80	93	466	2804
BENZENE, VINYL-,	241	81	94	6408	4006
CINNAMENE	241	81	94	6408	4006
PHENETHYLENE	241	81	94	6408	4006
STYRENE	241	81	94	6408	4006
STYROL	241	81	94	6408	4006
BENZENE, ETHYL-,	246	82	97	10210	1621
BENZENE, SEC-BUTYL-,	247	83	98	* 155	60
ETHANOL, 2-PHENOXY-,	248	84	99	10211	61
BENZOIC ACID, O-CHLORO-,	251	85	101	10212	4808
BENZOIC ACID, O-CHLORO-, /KBR/	11198	85	101	10212	4808
PHENOL, 2,4-DINITRO-,	253	86	3234	13483	4637
PHENOL, 2,4-DINITRO-, K	11646	86	3234	13483	4637
ETHANOL, 2-METHOXY-,	254	87		32	62
RHODANIC ACID	255	88	2964	10214	4638
RHODANINE	255	88	2964	10214	4638
RHODANINE K	10901	88	2964	10214	4638
4-THIAZOLIDINONE, 2-THIOXO-,	255	88	2964	10214	4638
M-CRESOL, 6-TERT-BUTYL-,	257	89	103	525	2005
BENZOIC ACID, 2,4-DIHYDROXY-,	260	90	105	9527	5002
TRIHYDRATE					
BENZOIC ACID, 2,4-DIHYDROXY-,	13212	90	105	9527	5002
TRIHYDRATE					

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NAME	PRISM	GRATING	UV	NMR	C-13
B-RESORCYLIC ACID, TRIHYDRATE	260	90	105	9527	5002
B-RESORCYLIC ACID, TRIHYDRATE	13212	90	105	9527	5002
1,3-BUTANEDIOL	265	91		10176	1818
1,3-BUTANEDIOL B	2167	91		10176	1818
1,2-PROPANEDIOL	267	92		V 45	2805
A-PROPYLENE GLYCOL	267	92		V 45	2805
HEPTANE	271	93		679	414
PROIOPHENONE	272	94	109	34	66
CYCLOHEXANONE, OXIME	276	95		6160	4007
PHENOL, PENTACHLORO-,	279	96	112		
ALLYL ALCOHOL	284	97		9730	1819
2-PROPEN-1-OL	284	97		9730	1819
O-CRESOL, 4,6-DINITRO-,	287	98	2907	3236	1622
O-CRESOL, 4,6-DINITRO-, K	10554	98	2907	3236	1622
DM 2	287	98	2907	3236	1622
DNC	287	98	2907	3236	1622
DMOC	287	98	2907	3236	1622
2-PROPANOL, 2-METHYL-1,1,1-TRI- CHLORO-, HEMIHYDRATE	289	99		6273	4643
PMENOL, 2,6-DIMETHYL-,	294	100	21874	36	69
2,6-XYLENOL	294	100	21874	36	69
2-BUTANONE	297	101		10292	70
KETONE, METHYL ETHYL,	297	101		10292	70
BENZENESULFONAMIDE, P-AMINO-,	301	102	117	9685	4009
DESEPTYL	301	102	117	9685	4009
PRONTOSIL ALBUM	301	102	117	9685	4009
PRONTYLIN	301	102	117	9685	4009
SULFANILAMIDE	301	102	117	9685	4009
PROPIONIC ACID, ETHYL ESTER	303	103		6665	
PROPANOIC ACID	307	104		5996	417
PROPIONIC ACID	307	104		5996	417
PROPIONIC ACID, PROPYL ESTER	309	105		38	
SULFANILAMIDE, N(1-2-THIAZOLYL)-,	311	106	119	6666	4809
SULFATHIAZOLE	311	106	119	6666	4809
PHENYL DISULFIDE	318	107	2094	286	73
PHENYL DISULFIDE K	7389	107	2094	286	73
PHENYL SULFIDE	320	108	121	39	75
PHENOTHIAZINE	321	109	122	8246	4403
PHENOTHIAZINE	3669	109	122	8246	4403
10H-PHENOTHIAZINE	321	109	122	8246	4403
THIODIPHENYLAMINE	321	109	122	8246	4403
1,2-BENZISOSULFONAZOLE, 3-OXO-,	322	110	15734	6667	4010
1,2-BENZISOTHTIAZOLIN-3-ONE, 1,1-DIOXIDE	322	110	15734	6667	4010
1,2-BENZISOTHTIAZOL-3-OL, 1,1-DIOXIDE	322	110	15734	6667	4010
SACCHARIN	322	110	15734	6667	4010
ALANINE, 3,3PR-DITHIODI-,	323	111			
ALANINE, 3,3PR-DITHIODI-,	11501	111			
L-/MINUS/-,					
CYSTINE, L-/MINUS/-,	323	111			
CYSTINE, L-/MINUS/-,	11501	111			
BUTYRIC ACID, BUTYL ESTER	338	112		6463	76
PROPIONIC ACID, PENTYL ESTER	339	113		40	77
BUTYRIC ACID, ETHYL ESTER	341	114		42	78
AZOBENZENE	350	115	136	43	79
BENZENEAZOBENZENE	350	115	136	43	79
2-PENTANONE, 4-HYDROXY-4-METHYL-,	356	116	139	303	2807
PHTHALIC ACID, DIETHYL ESTER	375	117	150	705	82
BENZENESULFONYL CHLORIDE	415	118	154	3150	90
BENZENE, METHYL-,	419	119	155	10216	91
TOLUENE	419	119	155	10216	91
NIACIN	434	120	161	14671	
NICOTINIC ACID	434	120	161	14671	
3-PYRIDINECARBOXYLIC ACID	434	120	161	14671	
ALANINE, PHENYL-, DL-,	436	121	20765	17174	4420
ALANINE, 3-PHENYL-, DL-,	11496	121	20765	17174	4420
HYDROCINNAMIC ACID, A-AMINO-,	436	121	20765	17174	4420
HYDROCINNAMIC ACID, A-AMINO-,	11496	121	20765	17174	4420
ANILINE, 2,5-DIETHOXY-,	446	122	2088	660	4421
ANILINE, 2,5-DIETHOXY-, K	7364	122	2088	660	4421
CARBAMIDE	447	123		16982	6801
UREA	447	123		16982	6801
ETHANOL, 2-//3-AMINOPROPYL/AMINO/-,	449	124		19607	
BENZENE, M-DIHYDROXY-,	467	125	2572	6672	4428
BENZENE, M-DIHYDROXY-,	9700	125	2572	6672	4428
M-BENZENEDIOL	467	125	2572	6672	4428
M-BENZENEDIOL	9700	125	2572	6672	4428
RESORCINOL	467	125	2572	6672	4428
RESORCINOL	9700	125	2572	6672	4428
CYCLOHEXANOL, 2-PHENYL-,	468	126	164	10185	
BUTENDIOIC ACID, TRANS-,	472	127	165	4407	4650
1,2-ETHENEDICARBOXYLIC ACID, TRANS-,	472	127	165	4407	4650
FUMARIC ACID	472	127	165	4407	4650
CINCHONINIC ACID, 2-PHENYL-,	473	128	166	10217	4429

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NAME	PRISM	GRATING	UV	NMR	C-13
CINCHONINIC ACID, 2-PHENYL-,	11644	128	166	10217	4429
CINCHOPHEN	473	128	166	10217	4429
CINCHOPHEN	11644	128	166	10217	4429
4-QUINOLINECARBOXYLIC ACID,	473	128	166	10217	4429
2-PHENYL-,					
4-QUINOLINECARBOXYLIC ACID, 2-	11644	128	166	10217	4429
PHENYL-,					
2,5-PYRROLIDINEDIONE	482	129	170	6673	101
SUCCINIMIDE	482	129	170	6673	101
PHENOL, 2,4,6-TRI-TERT-BUTYL-,	488	130	173	707	
CINCHONIDINE	502	131	175	25874	
CINCHONIDINE	9521	131	175	25874	
CINCHONINE	502	131	175	25874	
CINCHONINE	9521	131	175	25874	
4-QUINOLINEMETHANOL, A-/5-VINYL-2-	502	131	175	25874	
QUINUCLIDINYL/-,					
4-QUINOLINEMETHANOL, A-/5-VINYL-2-	9521	131	175	25874	
QUINUCLIDINYL/-,					
ACETIC ACID, /3,4-DIMETHOXY-	506	132	176	10402	2809
PHENYL/-,					
ACETIC ACID, 3,4-DIMETHOXYPHENYL-,	11174	132	176	10402	2809
HOMOERATRIC ACID	506	132	176	10402	2809
PHENOL, P-TERT-BUTYL-,	522	133	179	47	1406
PHENOL, P-TERT-BUTYL-,	8111	133	179	47	1406
TRYPTOPHAN, N-ACETYL-, L-,	535	134	187		
2,4-XYLENOL, 6-TERT-BUTYL-,	537	135	189	307	1407
BENZENE	579	136	198	3429	425
BENZENE	6402	136	1765	3429	425
BENZOL/E/	579	136	198	3429	425
BENZOL/E/	6402	136	1765	3429	425
BENZOIC ACID, 3,4-DICHLORO-,	583	137	199	8055	
BENZOIC ACID, 2,4-DICHLORO-,	585	138	200	3340	6403
TOLUENE, A,2,4-TRICHLORO-,	617	139	203	308	108
TOLUENE, A,A,A,4-TETRACHLORO-,	619	140	204	1181	109
TOLUENE, A,O-DICHLORO-,	621	141	206	1182	110
TOLUENE, A,4-DICHLORO-,	626	142	209	1183	114
TOLUENE, 3,4-DICHLORO-,	627	143	210	574	115
TOLUENE, 2,4-DICHLORO-,	628	144	211	1185	116
TOLUENE, P-CHLORO-,	629	145	212	51	117
TOLUENE, A,A,A,3,4-PENTACHLORO-,	631	146	213	1186	119
GLUCOSE, PENTADIGALLATE	656	147	222		
TANNIC ACID	656	147	222		
SUCCINIC ACID, 2,3-DIHYDROXY-,	658	148		8762	4658
L-/MINUS/-,					
TARTARIC ACID, L-/MINUS/-,	658	148		8762	4658
3-INDOLEACETIC ACID	670	149	223	1198	4659
PHOSPHORIC ACID, P-TOLYL ESTER	676	150	227	7013	
P-TOLYL PHOSPHATE	676	150	227	7013	
HEXANE	678	151		3431	126
HEXANE /VAPOR/	6606	151		3431	
BENZENE, TERT-BUTYL-,	679	152	228	53	815
BUTANE, 2,3-DIMETHYL-,	687	153		10219	816
1,3-BUTADIENE, 2-METHYL-,	688	154	28616	3434	
1,3-BUTADIENE, 2-METHYL-,/GAS/	7454	154	28616	3434	
ISOPRENE	688	154	28616	3434	
ISOPRENE GAS	7454	154	28616	3434	
CYCLOPENTANE, METHYL-,	689	155		3436	431
CYCLOPENTANE, METHYL-, /GAS/	7855	155		3436	431
BENZENE, P-DIMETHOXY-,	710	156	234	56	131
BENZENE, P-DIETHOXY-,	711	157	235	309	432
PHENOL, P-AMINO-,	712	158	236	717	4663
P-BENZOQUINONE, 2,5-DI-TERT-BUTYL-,	713	159	237	Y 314	4664
ASPARTIC ACID, N-BENZYL-, DL-,	743	160	244	27505	
BENZENE, P-DIBUTOXY-,	748	161	246	708	132
BENZOIC ACID	779	162	252	57	4671
BIPHENYL	783	163	255	Y 289	134
ALANINE, DL-,	794	164		7553	4676
PROPIONIC ACID, 2-AMINO-,	794	164		7553	4676
CARBOIC ACID	843	165	258	3152	137
PHENOL	843	165	258	3152	137
O-CRESOL	844	166	259	3153	2009
ACETIC ACID, BENZYL ESTER	859	167	260	Y 530	138
M-TOLUIDINE, A,A,A-TRIFLUORO-,	863	168	263	9542	820
NAPHTHALENE	865	169	265	62	139
HEXYLAMINE	866	170	266	63	140
CINNAMIC ACID, O-CHLORO-,	867	171	267	23009	4678
A-TOLUENESULFONAMIDE	869	172	268	10195	4819
BENZO/DEF/PHENANTHRENE	870	173	269	64	141
PYRENE	870	173	269	64	141
ACETOPHENONE, 4*-METHYL-,	872	174	270	10188	435
ACENAPHTHENE	875	175	272	65	143
ACENAPHTHENE	7458	175	272	65	143
ACENAPHTHYLENE, 1,2-DIHYDRO-,	875	175	272	65	143

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ACENAPHTHYLENE, 1,2-DIHYDRO-,	7458	175	272	65	143
MALEIC ACID, DIBUTYL ESTER	878	176	273	680	144
CINNAMIC ACID, ETHYL ESTER	884	177	276	718	147
P-XYLENE, 4-CHLORO-,	895	178	279	68	149
BENZENE, 4-/CHLOROMETHYL/-1,2-DIMETHYL-,	898	179	23022		
BENZ/A/ACENAPHTHYLENE	901	180	281	6679	151
FLUORANTHENE	901	180	281	6679	151
CYCLOHEXYLAMINE, N,N-DIMETHYL-,	906	181		725	153
ANTHRANILIC ACID, BUTYL ESTER	910	182	283	655	155
LINOLENIC ACID, METHYL ESTER	912	183		V 337	
LINOLENIC ACID	916	184		16005	
BENZOIC ACID, P-TOLYL ESTER	921	185	285	1187	157
P-CRESOL, BENZOATE	921	185	285	1187	157
BENZIL	922	186	286	73	158
BIBENZOYL	922	186	286	73	158
GLYOXAL, DIPHENYL-,	922	186	286	73	158
PROPIONIC ACID, BENZYL ESTER	929	187	287	311	441
BUTYRIC ACID, BENZYL ESTER	930	188	288	726	442
PROPANE, 1-CHLORO-1-NITRO-,	943	189	291	V 385	159
ETHANE, 1-CHLORO-1-NITRO-,	944	190	292	9145	443
PROPANE, 1,1-DICHLORO-1-NITRO-,	945	191	293	10182	444
PROPANE, 2-CHLORO-2-NITRO-,	946	192	294	6339	160
ANTHRANILIC ACID, ISOBUTYL ESTER	949	193	295	10191	1839
CINNAMALDEHYDE, A-PENTYL-,	952	194		6493	1840
CYANAMIDE, DIALLYL-,	953	195		1034	445
BENZENE, 1-CHLORO-2,4-DINITRO-,	964	196	5204	6681	4017
BENZENE, 1-CHLORO-2,4-DINITRO-, K	16569	196	5204	6681	4017
PHTHALIC ACID, DIHEXYL ESTER	969	197	297	10384	
PHENOL, 2,4-BIS(1-METHYLBUTYL)-, DEXTROSE	984	198	299		
DEXTROSE	990	199		6245	822
DEXTROSE	1040	199		6245	822
DEXTROSE	5455	199		6245	822
GLUCOPYRANOSE, D-,	5455	199		6245	822
GLUCOSE, D-,	5455	199		6245	822
GLUCOSE, D-/PLUS/-,	1040	199		6245	822
D-GLUCOSE	990	199		6245	822
D-GLUCITOL	991	200		9664	4441
SORBITOL	991	200		9664	4441
BENZENE, O-DICHLORO-,	1003	201	303	746	1844
BENZOIC ACID, ISOBUTYL ESTER	1006	202	304	75	1845
SALICYLIC ACID, ISOBUTYL ESTER	1007	203	305	724	1846
MENTHOL, SALICYLATE	1008	204	306	9725	
SALICYLIC ACID, P-MENTH-3-YL ESTER	1008	204	306	9725	
1-PENTANOL	52	205		10132	802
PENTYL ALCOHOL	52	205		10132	802
BENZOPHENONE, 4,4*-DICHLORO-,	1014	206	309	10392	
CELLOBIOSE, /PLUS/-,	1020	207			
GLUCOSE, 4-O-B-D-GLUCOPYRANOSYL-, D-/PLUS/-,	1020	207			
DICYCLOHEXYLAMINE	1033	208		10404	169
CAFFEINE	1036	209	315	V 204	
XANTHINE, 1,3,7-TRIMETHYL-,	1036	209	315	V 204	
M-XYLENE	1045	210	317	V 202	171
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	1051	211	318	1320	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	1051	211	17152	1320	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	5178	211	318	1320	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	5178	211	17152	1320	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	8655	211	17152	1320	
BENZALDEHYDE, 3-ETHOXY-4-HYDROXY-,	8655	211	318	1320	
BOURBONAL	1051	211	318	1320	
BOURBONAL	1051	211	17152	1320	
BOURBONAL	5178	211	318	1320	
BOURBONAL	5178	211	17152	1320	
BOURBONAL	8655	211	17152	1320	
BOURBONAL	8655	211	318	1320	
VANILLIN, ETHYL-,	1051	211	318	1320	
VANILLIN, ETHYL-,	1051	211	17152	1320	
VANILLIN, ETHYL-,	5178	211	318	1320	
VANILLIN, ETHYL-,	5178	211	17152	1320	
VANILLIN, ETHYL-,	8655	211	17152	1320	
VANILLIN, ETHYL-,	8655	211	318	1320	
BENZOIC ACID, METHYL ESTER	1052	212	319	78	172
1-BENZAZINE	1053	213	320	6683	4683
QUINOLINE	1053	213	320	6683	4683
GLUCOPYRANOSIDE, A-D-GLUCOPYRANOSYL-, A-D-,	1058	214		3284	
TREHALOSE /A,A-TREHALOSE/	1058	214		3284	
CYCLOHEXAMEXOL, 1,2,3,4,5,6-,	1060	215		6295	4208
INOSITE	1060	215		6295	4208
INOSITOL	1060	215		6295	4208
PHENOL, 4,4*-ISOPROPYLDENEDI-,	1070	216	325	18669	176
BENZOIC ACID, 2,4,6-TRINITRO-,	1112	217	331	25010	

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GLYCERO-2-PHOSPHATE, DISODIUM SALT, HYDRATED	1125	218		10144	6204
PHOSPHORIC ACID, 2-HYDROXY-1-/HYDROXYMETHYL/ETHYL ESTER, DISODIUM SALT	1125	218		10144	6204
SODIUM GLYCERO-2-PHOSPHATE	1125	218		10144	6204
NAPHTHALENE, 2,3-DIMETHYL-,	1145	219	340	6527	
NAPHTHALENE, 2,3-DIMETHYL-,	8569	219	340	6527	
CINNAMIC ACID, 4-HYDROXY-3-METHOXY-, ETHYL ESTER	1177	220	348	656	
FERULIC ACID, ETHYL ESTER	1177	220	348	656	
CHRYSENE	1188	221	351	31624	
CHRYSENE	7539	221	351	31624	
NAPHTHALENE, 2,6-DIMETHYL-,	1190	222	352	1201	187
11H-BENZO/B/FLUORENE	1191	223	353	25011	
BENZENE, 1,2,4,5-TETRAMETHYL-,	13386	224	355	85	
BENZENE, 1,2,4,5-TETRAMETHYL-,	1199	224	355	85	188
DURENE	1199	224	355	85	188
DURENE	13386	224	355	85	
P-MENTHANE-1,8-DIOL, HYDRATE	1243	225		14679	2818
TERPIN HYDRATE	1243	225		14679	2818
ETHANE, 1,1-DICHLORO-1-NITRO-,	1263	226	377	10364	2820
BENZOTRICHLORIDE	1268	227	380	90	193
TOLUENE, A,A,A-TRICHLORO-,	1268	227	380	90	193
PHTHALIC ANHYDRIDE, TETRACHLORO-,	1271	228	382		
ANILINE, O-NITRO-,	1276	229	385	6495	454
NAPHTHALENE, 2-METHYL-,	1277	230	12432	6938	194
ANILINE, 2,4-DINITRO-,	1287	231	387	3290	4211
DIPHENYLAMINE, 2-NITRO-,	1292	232	388	681	1483
DIPHENYLAMINE, 2-NITRO-,	8351	232	388	681	1483
FLUOREN-2-AMINE	145	233	54	18667	
2-FLUORENAMINE	145	233	54	18667	
ACETIC ACID, CHLORO-, ETHYL ESTER	1301	234		V 73	195
PHTHALIC ACID, DIPHENYL ESTER	1304	235	391	93	197
3-ALIZARINSULFONIC ACID, SODIUM SALT	1308	236	15739		
CARBAZOLE	1311	237	13550	6688	6418
9H-DIBENZO/B,D/PYRROLE	1311	237	13550	6688	6418
DIPHENYLENIMINE	1311	237	13550	6688	6418
PHENOL, 2,4-DICHLORO-,	1315	238	9786	6689	6206
PHENOL, 2,4-DICHLORO-,	8199	238	9786	6689	6206
ANTHRACENE	1319	239	394	25016	
DIPHENYLENEMETHANE	1329	240	2114	288	338
DIPHENYLENEMETHANE	7540	240	2114	288	338
FLUORENE	1329	240	2114	288	338
FLUORENE	7540	240	2114	288	338
9H-FLUORENE	7540	240	2114	288	338
ETHER, ETHYL, /LIQUID/	1335	241		3998	
ETHER, ETHYL, /VAPOR/	6401	241		3998	
ETHYL ETHER /LIQUID/	1335	241		3998	
ETHYL ETHER /VAPOR/	6401	241		3998	
1,3-PROPANEDIOL, 2-HYDROXYMETHYL-2-NITRO-,	1346	242	399	1203	203
PHENOL, P-CHLORO-,	1418	243	409	17044	210
2-FUROIC ACID, 5-NITRO-,	1424	244	410	10354	
2-FUROIC ACID, 5-NITRO-, ETHYL ESTER	1434	245	412	691	6209
O-CRESOLPHTHALEIN	1464	246	2283	11968	4447
O-CRESOLPHTHALEIN	8808	246	2283	11968	4447
PHENOLPHTHALEIN, 3PR,3PRPR-DIMETHYL-,	1464	246	2283	11968	4447
PHENOLPHTHALEIN, 3PR,3PRPR-DIMETHYL-,	8808	246	2283	11968	4447
PHTHALIDE, 3,3-BIS/6-HYDROXY-M-TOLYL/-,	1464	246	2283	11968	4447
PHTHALIDE, 3,3-BIS/6-HYDROXY-M-TOLYL/-,	8808	246	2283	11968	4447
ETHANE, 1,1,2,2-TETRABROMO-,	1465	247		6409	212
CAMPENE	11919	248		10614	
CAMPENE, /MINUS/-,	1474	248		10614	
NORBORNANE, 2,2-DIMETHYL-3-METHYLENE-,	11919	248		10614	
NORBORNANE, 2,2-DIMETHYL-3-METHYLENE-, /MINUS/-,	1474	248		10614	
ACETIC ACID, FURFURYL ESTER	1475	249	420	V 167	459
FURFURYL ALCOHOL, ACETATE	1475	249	420	V 167	459
M-XYLENE, 5-TERT-BUTYL-2,4,6-TRI-NITRO-,	1479	250	422	6497	4212
1-DODECANOL	1492	251		103	218
DODECYL ALCOHOL	1492	251		103	218
BENZOIC ACID, ETHYL ESTER	1506	252	426	1204	219
BENZOIC ACID, BENZYL ESTER	1509	253	427	V 627	2833
ACETIC ACID, CINNAMYL ESTER	1521	254	431	682	222
SALICYLIC ACID, ISOPENTYL ESTER	1522	255	432	1189	1208
SALICYLIC ACID, BENZYL ESTER	1523	256	433	719	1411

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UNDECANOIC ACID, 4-HYDROXY-, G-LACTONE	1525	257		6508	2834
NONANOIC ACID, 4-HYDROXY-, G- LACTONE	1528	258		6021	
ACETIC ACID, /P-CHLOROPHENOXY/-,	1590	259	457	V 500	6436
ACETIC ACID, /P-CHLOROPHENOXY/-,	13139	259	457	V 500	6436
FUMARIC ACID, DIMETHYL ESTER	1600	260	458	110	229
ACETANILIDE, P-HYDROXY-,	1602	261	2913	23018	6438
ACETANILIDE, P-HYDROXY-, K	10620	261	2913	23018	6438
ANILINE, O-AMINO-,	1604	262	460	112	231
1,2-BENZENEDIAMINE	1604	262	460	112	231
O-PHENYLENEDIAMINE	1604	262	460	112	231
RESORCINOL DIBENZOATE C	1624	263	2103	7087	6440
RESORCINOL DIBENZOATE K	7507	263	2103	7087	6440
HYDROQUINONE, CHLORO-,	1625	264	9787	8217	2013
ACETIC ACID, PHENYL-, PHENETHYL ESTER	1633	265	467	720	829
BUTYRIC ACID, PHENETHYL ESTER	1648	266	468	727	461
ACETIC ACID, P-TOLYL ESTER	1649	267	1458	3157	235
1-PROPANOL, 3-PHENYL-,	1651	268	470	116	237
SALICYLIC ACID, PHENETHYL ESTER	1654	269	473	728	
BENZOPYRAN-2-ONE, 2H-1-,	1691	270	492	V 225	242
CINNAMIC ACID, O-HYDROXY-, D-LACTONE	1691	270	492	V 225	242
COUMARIN	1691	270	492	V 225	242
TOLUENE, O,A,A,A-TETRACHLORO-,	1768	271	493	1190	245
ACETOPHENONE, 4*-CHLORO-,	1769	272	494	V 188	246
ACETANILIDE, 4*-FORMYL-,	1770	273	495	665	3129
ACETANILIDE, 4PR-FORMYL-,	14635	273	495	665	3129
ETHANE, 1,1-DICHLORO-1,2-DIBROMO-,	1771	274		6379	247
PYRIDINE, 2,2PR-IMINODI-,	1786	275	9788	529	6445
THIOPHENE, 2-BROMO-,	1800	276	502	1408	
THIOPHENE, 2,5-DICHLORO-,	1809	277	506	1319	249
PHTHALIMIDE, N-BENZYL-,	1812	278	507	10336	4214
ANTHRACENE, 9,10-DIHYDRO-9,10- DIOXO-,	1815	279	508	25022	
ANTHRAQUINONE	1815	279	508	25022	
BENZOIC ACID, P-HYDROXY-, BENZYL ESTER	1816	280	509	10414	6805
ACETANILIDE, 4PR-AMINO-,	1818	281	510	17046	6449
THIOCYANIC ACID, 2,4-DINITROPHENYL ESTER	1832	282	9790	13457	
BENZOIC ACID, ISOPENTYL ESTER	1866	283	524	9281	254
METHANE, DIBROMOCHLORO-,	1896	284		6708	2846
PHTHALIC ACID, DIBUTYL ESTER	1902	285	529	721	259
M-CRESOL, 6-ISOPROPYL-,	1916	286	531	V 270	6452
3-P-CYMEOL	1916	286	531	V 270	6452
THYMOL	1916	286	531	V 270	6452
METHANOL /LIQUID/	1918	287		V 1	261
METHYL ALCOHOL /LIQUID/	1918	287		V 1	261
P-ANISIC ACID, METHYL ESTER	1936	288	533	124	6454
ACETIC ACID, DIPHENYLHYDROXY-,	1938	289	534	9818	6455
ACETIC ACID, DIPHENYLHYDROXY-,	13454	289	534	9818	6455
BENZILIC ACID	1938	289	534	9818	6455
BENZILIC ACID	13454	289	534	9818	6455
GLYCOLIC ACID, DIPHENYL-,	1938	289	534	9818	6455
GLYCOLIC ACID, DIPHENYL-,	13454	289	534	9818	6455
3-HEPTANONE	2034	290	548	1311	470
ACETIC ACID, PHENYL-, BENZYL ESTER	2079	291	555	J 122	264
STILBENE, A-METHYL-, TRANS-,	2081	292			
P-TOLUIC ACID	2152	293	565	1113	6463
P-TOLUAMIDE	2155	294	568	693	
BENZOIC ACID, M-NITRO-, K	11481	295	3159	703	6464
BENZOIC ACID, M-NITRO-, M	2159	295	3159	703	6464
PHENOL, 2-AMINO-4-NITRO-,	2161	296	570	2824	6605
ACETAMIDE, N-/1-NAPHTHYL/-,	2164	297	571	21806	
ACETAMIDE, N-/2-NAPHTHYL/-,	2165	298	572	131	
1,2-ETHANEDIOL	2166	299		6406	265
ETHYLENE GLYCOL	2166	299		6406	265
PROPIONIC ACID, BUTYL ESTER	2170	300		6706	266
HYDANTOIN, 3-BROMO-5,5-DIMETHYL-,	2171	301	574	694	
CARBON TETRACHLORIDE	2210	302			2855
CARBON TETRACHLORIDE /VAPOR/	6521	302			2855
METHANE, TETRACHLORO-,	2210	302			2855
METHANE, TETRACHLORO-, /VAPOR/	6521	302			2855
BENZOTHIOPURAN	2213	303	589	134	2601
BENZO/B/THIOPHENE	2213	303	589	134	2601
THIANAPHTHENE	2213	303	589	134	2601
2,3-INDOLEDIONE	2214	304	590	17050	6606
ISATIN	2214	304	590	17050	6606
CHLOROFORM	2224	305		10513	270
METHANE, TRICHLORO-,	2224	305		10513	270
BIURET, 2,4-DITHIO-,	2225	306	597	23025	

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BIURET, 2,4-DITHIO-, K	12983	306	597	23025	
ACETONITRILE, PHENYL-,	2231	307	598	135	272
ACETAMIDE, 2-PHENYL-,	2236	308	599	6588	
ISOBUTYLAMINE	2245	309		6499	2859
2-PROPANOL, 1-CHLORO-,	2249	310		6711	835
SALICYLIC ACID, BUTYL ESTER	2253	311	601	6712	2860
BENZONITRILE	2255	312	602	138	483
BENZOTHAZOLE	2256	313	603	139	484
SUCCINIC ACID, DIBENZYL ESTER	2257	314	604	140	485
MALONIC ACID, DIMETHYL-,	23746	315		896	
NAPHTHALENE, 1-BROMO-,	2267	316	606	143	3604
PHENETOLE, P-BROMO-,	2268	317	607	V 198	277
PROPIONIC ACID, 2-BROMO-,	2271	318		144	2864
P-XYLENE	2276	319	609	V 203	279
P-TOLUENESULFONAMIDE	2289	320	611	666	4026
ANILINE, M,N-DIBUTYL-,	2304	321	612	147	
M-CRESOL	2338	322	622	V 160	287
BENZENE, P-DIBROMO-,	2393	323	625	6717	489
BENZENE, M-DIBROMO-,	2394	324	21889	18683	4686
CARYACROL	2470	325	653	684	2869
2-P-CYMENOL	2470	325	653	684	2869
BENZOPHENONE	2494	326	659	153	493
BENZOPHENONE	14800	326	659	153	493
PHENYL KETONE	2494	326	659	153	493
BENZYL BROMIDE	2504	327	660	154	296
TOLUENE, A-BROMO-,	2504	327	660	154	296
SALICYLIC ACID	2541	328	671	6246	6216
SALICYLIC ACID	17414	328	671	6246	6216
8-QUINOLINOL, 2-METHYL-,	2573	329	9883	314	
ANTHRANILIC ACID	2703	330	729	3159	6610
BENZOIC ACID, O-AMINO-,	2703	330	729	3159	6610
BENZOIC ACID, BUTYL ESTER	2711	331	732	158	303
CINNAMIC ACID, ISOBUTYL ESTER	2715	332	733	1206	305
BENZON, A-OXIME	13599	333	734	1207	4028
BENZON, A-OXIME M	2718	333	734	1207	4028
ETHER, BUTYL PHENYL,	2720	334	735	6727	306
ACETOPHENONE, 2-BENZYLIDENE-,	2723	335	737	160	498
ACRYLOPHENONE, 3-PHENYL-,	2723	335	737	160	498
CHALCONE	2723	335	737	160	498
TOLUENE, O-BROMO-,	2724	336	738	161	307
TOLUENE, P-BROMO-,	2726	337	740	163	309
ANISOLE, P-CHLORO-,	2727	338	741	164	310
BENZENE, 1-CHLORO-4-METHOXY-,	2727	338	741	164	310
ANILINE, M-BENZYLIDENE-,	2731	339	743	1208	2016
BENZAMIDE	2732	340	744	689	4217
1,2-PROPANEDIOL, 3-PHENOXY-,	2735	341	9884	31629	5405
1,2-PROPANEDIOL, 3-P-TOLYLOXY-,	2741	342	3524		
PHENOL, O-CHLORO-,	2800	343	772	1209	844
GLYCINE, M-BENZOYL-,	2802	344	773	10805	6612
HIPPURIC ACID	2802	344	773	10805	6612
2-NAPHTHYLAMINE, M,NPR-P-PHENYLENE-	2803	345			
BIS/-,					
P-PHENYLENEDIAMINE, M,NPR-DI-2-	2803	345			
NAPHTHYL-,					
BENZENE, 1,2-DIPROPOXY-,	2888	346	821	10792	503
BENZENE, 1,2-DIETHOXY-,	2890	347	823	171	505
BENZENE, 1-CHLORO-2-iodo-,	2892	348	825	690	507
BENZONITRILE, P-CHLORO-,	2893	349	826	V 483	508
O-ACETOTOLUIDIDE	2899	350	830	175	
M-ACETOTOLUIDIDE	2900	351	831	10793	6613
TEREPHTHALIC ACID, DIMETHYL ESTER K	11093	352	3015	3242	6614
TEREPHTHALIC ACID, DIMETHYL ESTER M	2909	352	3015	3242	6614
SALICYLIC ACID, PHENYL ESTER	2931	353	841	178	6615
SALOL	2931	353	841	178	6615
STILBENE, 2,4,6-TRINITRO-,	2947	354	845	10549	
BENZENE, P-DIISOPROPYL-,	2957	355	15754	7835	522
BENZENE, M-DIISOPROPYL-,	2958	356	15755	7836	523
BENZENE, 1,3-DIISOPROPYL-,	2958	356	15755	7836	523
1-NAPHTHALENEACETIC ACID, METHYL	2961	357	852	583	3605
ESTER					
PURINE-2,6,8-TRIOL	2963	358	853		
PURINE-2,6,8/1H,3H,9H/-TRIONE	2963	358	853		
URIC ACID	2963	358	853		
XANTHINE, 8-HYDROXY-,	2963	358	853		
P-ANISIL	2970	359	854	1210	
BENZIL, 4,4PR-DIMETHOXY-,	2970	359	854	1210	
BENZENE, 1,2,4,5-TETRACHLORO-,	2976	360	856	1179	
ANISOLE, M-METHYL-,	2987	361	860	1180	4687
ANISOLE	2988	362	861	9115	526
BENZENE, METHOXY-,	2988	362	861	9115	526
PHENETOLE, O-METHYL-,	2990	363	863	1211	2879
BENZALDEHYDE	3010	364	868	V 151	2881
BIBENZYL	3203	365	950	184	312

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ETHANE, 1,2-DIPHENYL-,	3203	365	950	184	312
BENZENE, BROMO-,	3227	366	954	1212	551
PHTHALIC ACID, DIISOBUTYL ESTER	3228	367	955	709	2883
BENZOIC ACID, M-HYDROXY-,	3247	368	967	1624	
BENZOIC ACID, P-HYDROXY-, METHYL ESTER	3249	369	969	1191	2403
BENZOIC ACID, P-HYDROXY-, METHYL ESTER	18045	369	969	1191	2403
BENZOIC ACID, P-HYDROXY-, ETHYL ESTER	3250	370	970	1192	6619
BENZOIC ACID, P-HYDROXY-, PROPYL ESTER	3251	371	971	1213	2404
BENZOIC ACID, P-HYDROXY-, PROPYL ESTER	18051	371	971	1213	2404
BENZOIC ACID, P-HYDROXY-, BUTYL ESTER	3252	372	972	1214	848
BENZOIC ACID, P-HYDROXY-, BUTYL ESTER	5434	372	972	1214	848
SALICYLAMIDE	3253	373	973	6740	6620
ETHYL PHOSPHONATE	3267	374		10516	
CARBONIC ACID, CYCLIC ETHYLENE ESTER	3296	375		6988	557
1,3-DIOXOLAN-2-ONE	3296	375		6988	557
ETHYLENE CARBONATE	3296	375		6988	557
CARBONIC ACID, CYCLIC PROPYLENE ESTER	3297	376		4885	558
1,3-DIOXOLAN-2-ONE, 4-METHYL-, PROPYLENE CARBONATE	3297	376		4885	558
HYDRAZINE, /2,4-DINITROPHENYL/-,	3299	377	989	9284	
HYDRAZINE, 2,4-DINITROPHENYL-,	18317	377	989	9284	
1,2-CYCLOHEXANEDIONE, DIOXIME	3472	378	1072	710	1625
13-DOCOSENOIC ACID, CIS-,	3504	379		711	561
ERUCIC ACID	3504	379		711	561
HYDRINDENE, 1,3-DIKETO-,	3505	380	1083	V 224	
1,3-INDANDIONE	3505	380	1083	V 224	
1,3-INDANDIONE K	10960	380	1083	V 224	
ANTHRACENE, 9,10-DIBROMO-,	3506	381	1084	V 618	
BENZHYDROL	3508	382	1085	186	6622
BENZHYDROL	13413	382	1085	186	6622
BENZYL ALCOHOL, A-PHENYL-,	3508	382	1085	186	6622
BENZYL ALCOHOL, A-PHENYL-,	13413	382	1085	186	6622
METHANOL, DIPHENYL-,	3508	382	1085	186	6622
METHANOL, DIPHENYL-,	13413	382	1085	186	6622
BENZENE, 2,4-DINITRO-1-FLUORO-,	3511	383	1087	712	1626
BENZALDEHYDE, P-NITRO-,	3517	384	1092	6027	
BENZANILIDE	3624	385	18277	10099	6623
PENTANE, 1,5-DIBROMO-,	3654	386		6745	566
BENZENE, 1,2-DICHLORO-4-NITRO-,	3655	387	1114	687	4219
BENZENE, 1,4-DICHLORO-2-NITRO-,	3656	388	1115	688	1627
BIPYROMUCYL	3665	389	1120	6748	
FURIL	3665	389	1120	6748	
GLYOXAL, DI-2-FURYL-,	3665	389	1120	6748	
2-FUROYL CHLORIDE	3667	390	1121	8775	571
FURFURIN	3682	391	15759	7210	
FURFURIN K	11820	391	15759	7210	
2-IMIDAZOLINE, 2,4,5-TRI-2-FURYL-,	3682	391	15759	7210	
ANILINE	3695	392	1129	191	1420
3,4-XYLENOL	1184	393	1162	193	825
3,4-XYLENOL	3819	393	1162	193	825
ACETIC ACID, PHENETHYL ESTER	3860	394	1172	V 261	2891
ISOVALERIC ACID, PHENETHYL ESTER	3863	395	1173	695	
SALICYLIC ACID, ETHYL ESTER	3870	396	1174	196	2892
PHENOL, 2,4,6-TRINITRO-,	3891	397	1181	1753	
PICRIC ACID	3891	397	1181	1753	
TRIAZOLE, 2H-1,2,3-, 4-PHENYL-,	4117	398	1189	10984	
2-BUTANONE, 3-METHYL-, 2,4-DINITRO- PHENYLHYDRAZONE	4118	399	1190	10879	
FORMALDEHYDE, 2,4-DINITROPHENYL- HYDRAZONE	4127	400	1192		
CYCLOPENTANONE, 2,4-DINITROPHENYL- HYDRAZONE	4171	401		25521	
3-PENTANONE, 2,4-DINITROPHENYL- HYDRAZONE	4179	402	1212	25523	
4-PYRIMIDINOL, 2,6-DIAMINO-5- NITROSO-,	4297	403			
2-PICOLINE, 5-ETHYL-,	2586	404	1241	571	
2-PICOLINE, 5-ETHYL-,	4450	404	1241	571	592
PYRIDINE, 5-ETHYL-2-METHYL-,	4450	404	1241	571	592
2-PENTENE	4534	405			
2-PENTENE	4616	405			
ACETYLENE, DIPHENYL-,	4537	406	1255	205	318
TOLAN	4537	406	1255	205	318
BENZENE, 1,3,5-TRIMETHYL-,	4539	407	1256	9910	319

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MESITYLENE	4539	407	1256	9910	319
BENZENE, M-DIPHENYL-,	4542	408	2171	206	322
BENZENE, M-DIPHENYL-,	8030	408	2171	206	322
M-TERPHENYL	4542	408	2171	206	322
M-TERPHENYL	8030	408	2171	206	322
BENZENE, O-DIPHENYL-,	4543	409	1257	10622	323
O-TERPHENYL	4543	409	1257	10622	323
BENZENE, HEXACHLORO-,	4545	410			
ETHANE, HEXACHLORO-,	4546	411			
HEXANE, 1-BROMO-,	4550	412		6752	602
BENZOIC ACID, O-iodo-,	4567	413	1262	3092	
BENZOIC ACID, O-iodo-, K	12070	413	1262	3092	
ACETOPHENONE, 4*-BROMO-,	4580	414	1267	219	1423
1-BENZAZOLE	1170	415	1269	J 189	451
1-BENZAZOLE	4586	415	1269	J 189	451
BENZO/B/PYRROLE	1170	415	1269	J 189	451
1-BENZO/B/PYRROLE	4586	415	1269	J 189	451
INDOLE	1170	415	1269	J 189	451
INDOLE	18034	415	1269	J 189	451
1-INDOLE	4586	415	1269	J 189	451
ACETANILIDE, 4*-BROMO-,	4590	416	1271	6464	6626
UREA, PHENYL-,	4591	417	1272	10625	
UREA, 1-PHENYL-2-THIO-,	4592	418	1273	10626	
ANISOLE, 4-CHLORO-2-NITRO-,	4597	419	1274	7082	
ANISOLE, 2,4,6-TRIBROMO-,	4598	420	1275	696	
BENZALDEHYDE, SEMICARBAZONE	4599	421	1276		
BENZENE, 1,2,4-TRICHLORO-,	4600	422	1277	221	610
ANISOLE, O-PHENOXY-,	4604	423	15767	6029	
BENZENE, 1-METHOXY-2-PHENOXY-,	4604	423	15767	6029	
BENZENE, /1-BROMOETHYL/-,	4617	424	1279	223	612
BENZENE, 1-FLUORO-4-NITRO-,	4618	425	1280	224	2899
METHANE, DIIDO-,	4636	426		226	619
PROPANE, 1-BROMO-2-METHYL-,	4643	427		6767	2902
PROPANE, 2-BROMO-2-METHYL-,	4645	428		229	4040
PROPANE, 2-BROMO-2-METHYL-, GAS	4648	428		229	
PROPANE, 2-CHLORO-2-METHYL-,	4646	429		6768	328
PROPANE, 2-CHLORO-2-METHYL-, GAS	4649	429		6768	
5-TRIAZOLO/1,5-A/PYRIMIDIN-7-OL,	4669	430	15768	25081	
5-METHYL-,					
PHENETOLE, O-CHLORO-,	4671	431	1283	234	
PHENETOLE, P-CHLORO-,	4672	432	1284	235	627
ISOCTANE /SO-CALLED/	80	433		3432	1613
ISOCTANE /SO-CALLED/ /VAPOR/	6608	433		3432	1613
PENTANE, 2,2,4-TRIMETHYL-,	80	433		3432	1613
PENTANE, 2,2,4-TRIMETHYL-,	4681	433		3432	1613
PENTANE, 2,2,4-TRIMETHYL-, /VAPOR/	6608	433		3432	1613
BENZENE, 1-BROMO-2-ETHYL-,	4682	434	1289	6030	
BENZENE, 1-CHLORO-4-NITRO-,	4683	435	1290	10629	628
TOLUENE, 2-CHLORO-6-NITRO-,	4690	436	1291	675	630
TOLUENE, O-NITRO-,	4692	437	1292	676	857
TOLUENE, P-NITRO-,	4693	438	1293	677	632
ACRYLIC ACID, 2-ETHYLHEXYL ESTER	4695	439	28602	6309	634
M-CRESOL, 4-CHLORO-,	4726	440	1303	10933	6627
M-CRESOL, 4-CHLORO-, C	9809	440	1303	10933	6627
O-XYLENE, A-BROMO-,	4737	441	1305	239	643
BENZERYTHRENE	4771	442	9885		
QUATERPHENYL, 1,1PR 4PR,1PRPR -	4771	442	9885		
4PRPR,1PRPRPR-,					
P-QUATERPHENYL	4771	442	9885		
PHENOL, P-BROMO-,	4892	443	1365	678	6227
BENZOIC ACID, P-NITRO-, METHYL	4899	444	1366	584	
ESTER					
ACETIC ACID, //CARBOXYMETHYLIMINO/-	4901	445		27533	
BIS/ETHYLENENITRIL//TETRA-,					
ACETAMIDE, N-/D-1-FORMYL-ARABINO-	5119	446		13776	
2,3,4,5-TETRAHYDROXYPENTYL/-,					
GLUCOSE, 2-ACETAMIDO-2-DEOXY-, D-,	5119	446		13776	
1,3-CYCLOPENTADIENE, HEXACHLORO-,	5142	447	1397		859
PROPANE, 1,1,1,2,2,3,3-	5143	448		1215	4048
HEPTACHLORO-,					
2,5-FURANDIONE, DIHYDRO-,	5150	449		6779	
SUCCINIC ANHYDRIDE	5150	449		6779	
ACETIC ACID, PHENYL-, ISOPENTYL	5153	450	1401		6229
ESTER					
CINNAMIC ACID, PHENETHYL ESTER	5161	451	1404	729	655
CINNAMIC ACID, PHENETHYL ESTER	18095	451	1404	729	655
GLYCIDIC ACID, 3-PHENYL-, ETHYL	5164	452	1405	10935	656
ESTER					
HYDROCINNAMIC ACID, A,B-EPOXY-,	5164	452	1405	10935	656
ETHYL ESTER					
MALONIC ACID, ACETAMIDO-, DIETHYL	5169	453	1406	730	
ESTER					
NICOTINIC ACID, ETHYL ESTER	5170	454	1407	697	658

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NAME	PRISM	GRATING	UV	NMR	C-13
ACETIC ACID, P-PHENYLENE ESTER	5189	455	23030	252	665
HYDROQUINONE, DIACETATE	5189	455	23030	252	665
HYDROQUINONE DIACETATE K	7352	455	2078	252	665
GLYCINE ANHYDRIDE	5195	456		27534	
OCTANE	5245	457		10939	331
DIBENZ/DE,KL/ANTHRACENE	5253	458		25562	
PERYLENE	5253	458		25562	
PHENOL, PENTABROMO-	5277	459	1449		
PHENOL, PENTABROMO-	13003	459			
PHENETHYL ALCOHOL, A,A-DIMETHYL-	5294	460	1452	698	2020
2-HENDECANONE	5310	461	1454	663	696
2-UNDECANONE	5310	461	1454	663	696
2-NONADECANONE	5312	462	1455	664	698
2-TRIDECANONE	5313	463	1456	6237	699
2,4-HEXADIENE, 2,5-DIMETHYL-	5315	464	1457	V 515	700
CHRYSANTHEMUMMONOCARBOXYLIC ACID, ETHYL ESTER	5317	465		9119	
CYCLOPROPANECARBOXYLIC ACID, 2,2-DIMETHYL-3-/2-METHYLPROPENYL/-, ETHYL ESTER	5317	465		9119	
PHENOL, 2,4,6-TRIBROMO-	5323	466	1459	667	
LACTIC ACID	5338	467		9265	2929
PROPIONIC ACID, 2-HYDROXY-	5338	467		9265	2929
2-BENZOXAZOLINONE	5351	468	1465	668	1428
BENZOXAZOLONE, 2/3H/-,	5351	468	1465	668	1428
ETHYLENE, TETRABROMO-	5422	469	1485		866
ANTISCORBUTIC VITAMIN	5424	470	3455	3126	6811
ANTISCORBUTIC VITAMIN	13217	470	3455	3126	6811
ASCORBIC ACID, L-/PLUS/-,	5424	470	3455	3126	6811
ASCORBIC ACID, L-/PLUS/-,	13217	470	3455	3126	6811
VITAMIN C	5424	470	3455	3126	6811
VITAMIN C	13217	470	3455	3126	6811
ANTHRANILIC ACID, 5-CHLORO-	5426	471	1486	1216	
ANTHRANILIC ACID, 5-CHLORO-	13915	471	1486	1216	
BENZOIC ACID, 2-AMINO-5-CHLORO-	5426	471	1486	1216	
GLUTAMIC ACID, HYDROCHLORIDE, D-/PLUS/-,	5429	472		23055	
GLUTARIC ACID, 2-AMINO-, HYDRO- CHLORIDE, D-/PLUS/-,	5429	472		23055	
BENZOIC ACID, P-AMINO-, METHYL ESTER	5433	473	1490	585	
BENZOIC ACID, P-HYDROXY-, BUTYL ESTER	3252	474	972	1214	848
BENZOIC ACID, P-HYDROXY-, BUTYL ESTER	5434	474	972	1214	848
ANTHRACENE, 9,10-DIHYDRO-9-OXO-, ANTHRONE	5436	475	1491	V 621	
1,3-BUTANEDIONE, 1-PHENYL-, BUTYROPHENONE, 3-OXO-, MELAMINE	5436	475	1491	V 621	
5-TRIAZINE, 2,4,6-TRIAMINO-, DILANTIN	5437	476	1492	10944	868
DILANTIN	5437	476	1492	10944	868
DINTOINA	5460	477	1499		
DINTOINA	5460	477	1499		
DIPHEDAN	5470	478	2168	3215	
DIPHEDAN	8026	478	2168	3215	
HYDANTOIN, 5,5-DIPHENYL-, HYDANTOIN, 5,5-DIPHENYL-, AMMONIUM CHLORIDE, /CARBOXY- METHYL/TRIMETHYL-	5470	478	2168	3215	
AMMONIUM CHLORIDE, /CARBOXY- METHYL/TRIMETHYL-	8026	478	2168	3215	
AMMONIUM HYDROXIDE, /CARBOXY- METHYL/TRIMETHYL-, INNER SALT	5471	479		10945	873
BETAINE	11494	479		10945	
BETAINE	16563	479		10945	
BETAINE	5471	479		10945	873
BETAINE, HYDROCHLORIDE	11494	479		10945	
BETAINE, HYDROCHLORIDE	16563	479		10945	
OXYNEURINE	5535	480	1534	10674	
SUCCINILIC ACID, 2-METHYLENE-, ACETIC ACID, M-PHENYLENE ESTER	5551	481	1545	699	877
RESORCINOL, DIACETATE	5551	481	1545	699	877
GLUTAMIC ACID, D-/MINUS/-,	5561	482			
GLUTAMIC ACID, D-/MINUS/-,	8657	482			
GLUTARIC ACID, 2-AMINO-, D- -/MINUS/-,	5561	482			
GLUTARIC ACID, 2-AMINO-, D- -/MINUS/-,	8657	482			
PROPIOPHENONE, 4PR-CHLORO-, O-CRESOL, 4-PHENYLAZO-, BENZALDEHYDE, AZINE	5669	483	1575	700	890
	5671	484	1576	701	
	5702	485	1584	702	

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NAME	PRISM	GRATING	UV	NMR	C-13
2-FURALDEHYDE, AZINE	5704	486	1585	10943	6471
FURFURAL, AZINE	5704	486	1585	10943	6471
MESITYLENE, 2-BROMO-,	5729	487	1591	670	901
BENZENESULFONIC ACID, SODIUM SALT	5735	488	1594	6469	903
BENZOIC ACID, P-ACETAMIDO-,	5736	489	1595	1218	1223
10-BORNANESULFONIC ACID, 2-OXO-,	5738	490	1596	669	
MALONIC ACID, BENZYL-,	5739	491	1597	9117	
P-TOLUENESULFONIC ACID, BUTYL ESTER	5754	492	1602	671	907
BENZENESULFONAMIDE	5760	493	1606	1174	908
BUTYRANILIDE	5762	494	1607	261	909
BENZALDEHYDE, 5-BROMO-2-HYDROXY-,	5767	495	1609	6363	
SALICYLALDEHYDE, 5-BROMO-,	5767	495	1609	6363	
ISOBUTYRPHENONE	5773	496	1614	10447	913
ACETONE, ACETYL-,	5774	497	1615	16871	914
ACETYLACETONE	5774	497	1615	16871	914
2,4-PENTANEDIONE	5774	497	1615	16871	914
ARABOASCORBIC ACID, D-,	5777	498	1617	10288	
D-ARABOASCORBIC ACID	18061	498	1617	10288	
ISOASCORBIC ACID	18061	498	1617	10288	
NAPHTHALENE, 1-NITRO-,	5850	499	1636	263	925
ACETIC ACID, PHENOXY-,	5852	500	1637	264	926
PHENOL, M-PENTADECYL-,	665	501		6677	123
1M-BENZOTRIAZOLE, 5-NITRO-,	5868	502	1645	16034	
NONANE, 1-BROMO-,	5869	503		10484	934
ACETIC ACID, 2-NAPHTHYLOXY-,	5871	504	1647	10485	6233
ACETIC ACID, P-NITROPHENYL-,	5872	505	2237	3223	935
ACETIC ACID, /P-NITROPHENYL/-,	8441	505	2237	3223	935
PHENOL, P-NITRO-,	5887	506	1684	6814	939
PHENOL, P-NITRO-,	5981	506	1684	6814	939
1-NAPHTHOL, 2-NITROSO-,	5888	507	1654	9935	
ANILINE, N,N-DIETHYL-P-NITROSO-,	5890	508	1655	3186	940
BENZENE, 1,2,3-TRICHLORO-,	5936	509	1673	266	
BENZALDEHYDE, P-ISOPROPYL-,	5973	510	1680	6825	954
P-BENZOQUINONE, CMPD WITH HYDRO-	5976	511	1682	17094	6815
QUINONE					
HYDROQUINONE, CMPD WITH P-BENZO-	5976	511	1682	17094	6815
QUINONE					
QUINHYDRONE	5976	511	1682	17094	6815
ACETOPHENONE, 2PR-HYDROXY-,	6011	512	1695	532	963
BENZENE, P-DIPHENYL-,	6024	513	2247	V 671	
BENZENE, P-DIPHENYL-,	8568	513	2247	V 671	
P-TERPHEHYL	6024	513	2247	V 671	
P-TERPHEHYL	8568	513	2247	V 671	
ACETIC ACID, THIODI-,	6092	514		6440	969
ACETIC ACID, SODIUM SALT	6198	515		6034	976
SODIUM ACETATE	6198	515		6034	976
ISOINDOLE-1,3-DIONE	6227	516	9886	17100	
PHTHALIMIDE	6227	516	9886	17100	
BENZIDINE, 3,3PR-DIMETHOXY-,	6316	517	17845	3193	
BENZIDINE, 3,3PR-DIMETHOXY-,	6316	517	1738	3193	
BENZIDINE, 3,3PR-DIMETHOXY-,	6317	517	17845	3193	
BENZIDINE, 3,3PR-DIMETHOXY-,	6317	517	1738	3193	
BI-O-ANISIDINE, 4,4PR-,	6316	517	17845	3193	
BI-O-ANISIDINE, 4,4PR-,	6316	517	1738	3193	
BI-O-ANISIDINE, 4,4PR-,	6317	517	17845	3193	
BI-O-ANISIDINE, 4,4PR-,	6317	517	1738	3193	
OCTANOIC ACID, METHYL ESTER	6340	518		6834	991
1,3-NAPHTHALENE DIOL	6360	519	1752	6835	1630
METHYLAMINE, HYDROCHLORIDE	6369	520		6841	6817
TRIPENTYLAMINE	6375	521		17105	
BENZENE, 1-BROMO-4-IODO-,	6387	522	1764	6488	1003
1-HEXYN-3-OL, 3,5-DIMETHYL-,	6463	523		6008	1012
1-NAPHTHALENESULFONIC ACID, 4-AMINO-	6485	524		27553	
3-HYDROXY-,					
1,2,4-ACID	6485	524		27553	
ISOPENTYL NITRATE GAS	6486	525			
ISOPENTYL NITRATE LIQUID	6487	525			
BENZOIC ACID, M-AMINO-,	6493	526	1802	2822	1231
BILIRUBIN	6555	527			
3-PYRROLEPROPIONIC ACID, 5-//5-HY-	6555	527			
DROXY-4-METHYL-3-VINYL-2H-PYRROLENIN-2-					
YLIDENE/METHYL/-5PR-//2,3-DIHYDRO-4-					
METHYL-5H-FURO/2,3-B/PYRROL-5-YLIDENE/-					
METHYL/-2,2PR-METHYLENEBIS/4-METHYL-,					
PSEUDOURA, 2-ETHYL-2-THIO-,	6569	528	11103	25598	
PICRATE					
PROPENE, 3-BROMO-,	6603	529		273	720
P-BENZOQUINONE, TETRACHLORO-,	6634	530	1832		
CHLORANIL	6634	530	1832		
ACETOPHENONE, 2,4PR-DIBROMO-,	6641	531	1834	279	2956
ANILINE, M-BUTYL-,	6643	532	1836	280	6241
NORVALINE, N-/CHLOROACETYL/-, DL-,	6845	533		18356	
VALINE, N-/CHLOROACETYL/-, DL-,	6849	534		18543	