

厚生労働行政推進調査事業費補助金 (化学物質リスク研究事業)  
分担研究報告書

室内空気環境汚染化学物質の標準試験法の策定およびリスク低減化に関する研究

定量的リスク評価：

家庭用品放散試験データのデコンポリューション解析による放散化学物質の探索

研究分担者 神野 透人 名城大学薬学部 教授

研究要旨: 本研究では、市販のカーテン 26 製品について、超小型チャンバー  $\mu$ -CTE を用いて実施した放散試験データをもとに、デコンポリューション解析により、製品から放散される可能性のある化学物質の探索を行った。その結果、室内濃度指針値が定められている Toluene や Styrene の他に、既にシックハウス (室内空気汚染) 問題に関する検討会で初期リスク評価が行われた 2-Ethyl-1-hexanol やグリコールエーテル類、さらには、2-Ethyl-1-hexanol の生成源ともなり得る 2-Ethylhexyl Acrylate の放散が認められる製品も存在した。このように、クロマトグラムデータのデコンポリューション解析は、定量の Target としたものの以外の放散化合物について、半定量的な情報を取得できる有用なアプローチであると考えられる。

研究協力者: 酒井 信夫 (国立医薬品食品衛生研究所)、河上 強志 (国立医薬品食品衛生研究所)、田原 麻衣子 (国立医薬品食品衛生研究所)、香川 聡子 (横浜薬科大学)、森 葉子 (名城大学薬学部)

#### A. 目的

第 20 回シックハウス (室内空気汚染) 問題に関する検討会において、「室内空気環境汚染化学物質調査において検出された化学物質の初期曝露評価・初期リスク評価の結果」が提示された。これは、室内空気質の全国調査において比較的高濃度、あるいは高頻度で検出された揮発性有機化合物、すなわち、2-Ethyl-1-hexanol、2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate、2,2,4-Trimethyl-1,3-pentanediol diisobutyrate、Ethyl Acetate、Butyl Acetate、Propylene Glycol Monomethyl Ether、3-Methoxy-3-methylbutanol、Diethylene Glycol Methyl Ether、Diethylene Glycol Ethyl

Ether、Propylene Glycol Monomethyl Ether Acetate および Methyl Isobutyl Ketone の 11 化合物について、実態調査における Toluene 換算値としての最高検出濃度と有害性評価結果 (NOAEL または LOAEL) から MOE を導出したものである。

これらの初期リスク評価化合物については、今後、詳細な実態調査、すなわち詳細曝露評価を実施し、指針値策定の必要性について議論を進めていく必要がある。また、あらかじめ、これらの化学物質の室内における発生源を特定しておくことによって、効果的な低減策を講じることが可能になると考えられる。このような観点から、国立医薬品食品衛生研究所の酒井らは、 $\mu$ -CTE と呼ばれる超小型チャンバーを用いて、さまざまな家庭用品から放散される化学物質の定量的な評価を進めている。本研究では、放散試験で得られる GC/MS データを有効に活用して、室内環境から検出される可能性のある化学物質を広く探索する目的で、既存データのデコン

ポリマー解析を実施した。

## B. 実験方法

国立医薬品食品衛生研究所から提供された放散試験の GC/MS データ (市販のカーテン 26 製品) について、Analyzer Pro ver. 6.0.0.246 を用いてデコンポリューション解析を行った。主な解析パラメーターは以下の通りである。

Area Threshold:	500
Height Threshold:	0.1%
Width Threshold:	0.02 min
Fronting:	0%
Tailing:	0%
Signal to Noise:	5
Scan Window:	3
Resolution:	Minimum
Smoothing:	3

マススペクトルライブラリーには、NIST/EPA/NIH Mass Spectral Library (NIST 17) を用いた。

## C. 結果と考察

Table 1 に、デコンポリューション解析の結果、同定された化合物を示した。内部標準 (Toluene-d8) をもとに算出した概算値 (Toluene 換算値に相当) が 500 ng を超えて検出された化合物として、

**Sample 6:** Acetic acid (2339 ng)、1-Butanol (806 ng)、Butyl Acetate (782 ng)、2-Butoxyethanol (1856 ng)、Decane (695 ng)、2-Ethyl-1-hexanol (603 ng)、Hexadecane (1131 ng)、Heptadecane (1754 ng)、2,6,10,14-Tetramethylpentadecane (508 ng)、Octadecane (1157 ng)

**Sample 7:** 1-Butanol (1144 ng)、Styrene (664 ng)、Decane (739 ng)

**Sample 14:** Dodecane (506 ng)

**Sample 16:** Toluene (4359 ng)、Decane (893 ng)、2-Ethyl-1-hexanol (595 ng)、2-(2-Ethoxyethoxy) Ethanol, Acetate (5432 ng)、2-Ethylhexyl Acrylate (1174 ng)

**Sample 19:** 1-Butanol (1060 ng)、Decane (924 ng)、2-Butylcyclohexanol (522 ng)、Undecane (666 ng)、Decamethylcyclopentasiloxane (666 ng)、Dodecane (668 ng)、tridecane (909 ng)、Pentadecane (851 ng)、Hexadecane (605 ng)

**Sample 20:** 2-Ethyl-1-hexanol (533 ng)、1,2,3,4,4a,5,8,9,12,12a-decahydro-1,4-Methanobenzocyclodecene (531 ng)

**Sample 24:** 2-Butanone (1144 ng)、1-Butanol (2363 ng)、Toluene (528 ng)、Hexamethylcyclotrisiloxane (1028 ng)、Decane (1220 ng)、Dodecane (606 ng)、Dodecamethylcyclohexasiloxane (540 ng)

**Sample 25:** 1-Butanol (1466 ng)、Decane (971 ng)、2-Ethyl-1-Hexanol (1477 ng)、Dodecane (709 ng)

2-Ethyl-1-hexanol が比較的多くの製品、すなわち Sample 7 (603 ng)、15 (442 ng)、16 (595 ng)、20 (533 ng)、24 (376 ng) および 25 (1477 ng) で検出された。一方、Sample 16 および 20 では、2-Ethylhexyl Acrylate が最高でそれぞれ 1174ng、146 ng 検出されている。2-Ethylhexyl Acrylate は接着剤・粘着剤、塗料、アクリルゴムなどの原料として用いられており、Sample 16 および 20 で検出された 2-Ethyl-1-hexanol は、製造中に、あるいは製品に残存する原料モノマーの加水分解によって生じた可能性も考えられる。

環状シロキサン化合物が Sample 19 および 24 の他に、Sample 25 でも検出されている。この化合物は溶剤あるいはシリコングリス、シリコン樹脂などに由来する可能性がある。また、中には、室内濃度指針値が設定されている Toluene (Sample 16) や Styrene (Sample 7) が検出される製品も存在した。

## D. まとめ

市販のカーテン 26 製品について、超小型チャンバー  $\mu$ -CTE を用いて実施した放散試験データをもとに、デコンボリューション解析により、製品から放散される可能性のある化学物質の探索を行った。その結果、室内濃度指針値が定められている Toluene や Styrene の他に、既にシックハウス（室内空気汚染）問題に関する検討会で初期リスク評価が行われた 2-Ethyl-1-hexanol やグリコールエーテル類、さらには、2-Ethyl-1-hexanol の生成源ともなり得る 2-Ethylhexyl Acrylate の放散が認められる製品も存在した。このように、クロマトグラムデータのデコンボリューション解析は、定量の Target としたものの以外の放散化合物について、半定量的な情報を取得できる有用なアプローチであると考えられる。

#### E. 健康危険情報 なし

#### F. 研究発表 論文発表

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Table 1

試料番号	放散面	放散試験温度	RT	Area	Library Match	Semi-Quant	Area	Library Match	Semi-Quant	CAS #	Ave
R1-1	裏	25℃	9.29	6936043	Toluene-D8	100	6971722	Toluene-D8	100	2037-26-5	100
			24.07	7137795	Dodecane	103	7634376	Dodecane	110	112-40-3	106
R-1-1	裏	40℃	9.27	7034868	Toluene-D8	100	6997496	Toluene-D8	100	2037-26-5	100
							7362059	Dodecane	105	112-40-3	
			29.78	7882305	Tetradecane	112	8473542	Tetradecane	121	629-59-4	117
			32.38	13492026	Pentadecane	192	13660645	Pentadecane	195	629-62-9	194
			34.83	11414147	Hexadecane	162	10702879	Hexadecane	153	544-76-3	158
R-1-1	表	25℃	9.27	6936516	Toluene-D8	100	6924239	Toluene-D8	100	2037-26-5	100
			24.07	7714541	Dodecane	111	7872043	Dodecane	114	112-40-3	112
R-1-1	表	40℃	9.27	6275969	Toluene-D8	100	6805464	Toluene-D8	100	2037-26-5	100
			29.76	8031476	Tetradecane	128	7027523	Tetradecane	103	629-59-4	116
			32.36	13261434	Pentadecane	211	11654805	Pentadecane	171	629-62-9	191
			34.83	10616441	Hexadecane	169	9873534	Hexadecane	145	544-76-3	157
R-1-2	裏	25℃	9.27	6373221	Toluene-D8	100	6393811	Toluene-D8	100	2037-26-5	100
			24.07	6779989	Dodecane	106	6509214	Dodecane	102	112-40-3	104
R-1-2	裏	40℃	9.27	6118524	Toluene-D8	100	6295719	Toluene-D8	100	2037-26-5	100
R-1-2	表	25℃	9.27	6418597	Toluene-D8	100	6383325	Toluene-D8	100	2037-26-5	100
							6791405	Dodecane	106	112-40-3	
R-1-2	表	40℃	9.27	5436216	Toluene-D8	100	5852051	Toluene-D8	100	2037-26-5	100
R-1-3	裏	25℃	9.27	6173699	Toluene-D8	100	6060100	Toluene-D8	100	2037-26-5	100
R-1-3	裏	40℃	9.27	6264799	Toluene-D8	100	6291228	Toluene-D8	100	2037-26-5	100
R-1-3	表	25℃	9.27	6385167	Toluene-D8	100	6159749	Toluene-D8	100	2037-26-5	100
R-1-3	表	40℃	9.27	6089730	Toluene-D8	100	6263204	Toluene-D8	100	2037-26-5	100
R-1-4	裏	25℃	9.26	6330182	Toluene-D8	100	6374954	Toluene-D8	100	2037-26-5	100
R-1-4	裏	40℃	9.26	6443706	Toluene-D8	100	6475624	Toluene-D8	100	2037-26-5	100
R-1-4	表	25℃	9.26	6455212	Toluene-D8	100	6346877	Toluene-D8	100	2037-26-5	100
R-1-4	表	40℃	9.27	5898941	Toluene-D8	100	6317771	Toluene-D8	100	2037-26-5	100
R-1-5	裏	25℃	9.26	7252557	Toluene-D8	100	7213075	Toluene-D8	100	2037-26-5	100
R-1-5	裏	40℃	9.26	7112216	Toluene-D8	100	7226717	Toluene-D8	100	2037-26-5	100
R-1-5	裏	40℃					7354727	Tetradecane	102	629-59-4	
R-1-5	裏	40℃	34.80	7489685	Hexadecane	105	7543329	Hexadecane	104	544-76-3	105
R-1-5	表	25℃	9.26	7361948	Toluene-D8	100	7224034	Toluene-D8	100	2037-26-5	100
R-1-5	表	40℃	9.26	6482026	Toluene-D8	100	6879683	Toluene-D8	100	2037-26-5	100
			29.75	6636045	Tetradecane	102	7396315	Tetradecane	108	629-59-4	105
			34.80	7204017	Hexadecane	111	6899275	Hexadecane	100	544-76-3	106
R-1-6	裏	25℃	4.78	27423764	Acetic acid	546	28829537	Acetic acid	579	64-19-7	563
			6.27	28360508	1-Butanol	565	28235038	1-Butanol	567	71-36-3	566
			9.27	5020036	Toluene-D8	100	4977266	Toluene-D8	100	2037-26-5	100
			9.39	8795659	Toluene	175	9197462	Toluene	185	108-88-3	180
			10.57	33506450	Acetic acid, butyl ester	667	34734283	Acetic acid, butyl ester	698	123-86-4	683
			11.83	11336631	2-Pentanol, acetate	226	11685836	2-Pentanol, acetate	235	626-38-0	230
			13.32	6918650	2-Propenoic acid, butyl ester	138	7212088	2-Propenoic acid, butyl ester	145	141-32-2	141

Table 1

			13.75	45884691	<a href="#">Ethanol, 2-butoxy-</a>	914	48747867	<a href="#">Ethanol, 2-butoxy-</a>	979	111-76-2	947
			17.62	15932452	Decane	317	16569215	Decane	333	124-18-5	325
			18.07	8831196	<a href="#">1-Hexanol, 2-ethyl-</a>	176	8786907	<a href="#">1-Hexanol, 2-ethyl-</a>	177	104-76-7	176
			34.83	11931578	Hexadecane	238	11544911	Hexadecane	232	544-76-3	235
			37.15	18266840	Heptadecane	364	17388807	Heptadecane	349	629-78-7	357
			37.39	5068052	Pentadecane, 2,6,10,14-tetramethyl	101					
			39.35	10411262	Octadecane	207	9499359	Octadecane	191	593-45-3	199
R-1-6	裏	40°C	4.99	129665883	Acetic acid	2455	113338742	Acetic acid	2224	64-19-7	2339
			6.27	43391928	1-Butanol	821	40334477	1-Butanol	791	71-36-3	806
			9.27	5282575	Toluene-D8	100	5097008	Toluene-D8	100	2037-26-5	100
			9.39	9355693	Toluene	177	9190844	Toluene	180	108-88-3	179
			10.57	40844974	Acetic acid, butyl ester	773	40344771	Acetic acid, butyl ester	792	123-86-4	782
			11.83	15775797	2-Pentanol, acetate	299	15273123	2-Pentanol, acetate	300	626-38-0	299
			13.31	10578230	2-Propenoic acid, butyl ester	200	10275543	2-Propenoic acid, butyl ester	202	141-32-2	201
			13.75	101262904	<a href="#">Ethanol, 2-butoxy-</a>	1917	91521677	<a href="#">Ethanol, 2-butoxy-</a>	1796	111-76-2	1856
			17.62	36513900	Decane	691	35569106	Decane	698	124-18-5	695
			18.07	34048786	<a href="#">1-Hexanol, 2-ethyl-</a>	645	28567362	<a href="#">1-Hexanol, 2-ethyl-</a>	560	104-76-7	603
			20.44	7413305	Nonanal	140	6429877	Nonanal	126	124-19-6	133
			24.06	21136734	Dodecane	400	18670282	Dodecane	366	112-40-3	383
			24.55	7323258		139	6018430		118		
			29.76	7903799	Tetradecane	150	6476227	Tetradecane	127	629-59-4	138
			31.47	5575855	Hexadecane	106					53
			32.36	24358843	Pentadecane	461	19581086	Pentadecane	384	629-62-9	423
			33.83	8300566		157	6596885		129		143
			33.96	5563635	Pentadecane, 2-methyl-	105					
			34.15	6361732	Pentadecane, 3-methyl-	120					
			34.83	65187447	Hexadecane	1234	52352433	Hexadecane	1027	544-76-3	1131
			35.91	10892196	Hexadecane, 7-methyl-	206	8775720	Hexadecane, 7-methyl-	172	26730-20-1	189
			36.06	20093307	Pentadecane, 2,6,10-trimethyl-	380	16033181	Pentadecane, 2,6,10-trimethyl-	315	3892-00-0	347
			36.22	7107800	Hexadecane, 4-methyl-	135	5347698	Hexadecane, 4-methyl-	105	25117-26-4	120
			36.34	12682778	Hexadecane, 2-methyl-	240	9685095	Hexadecane, 2-methyl-	190	1560-92-5	215
			36.52	15159826	Hexadecane, 3-methyl-	287	11837509	Hexadecane, 3-methyl-	232	6418-43-5	260
			37.15	101641101	Heptadecane	1924	80689546	Heptadecane	1583	629-78-7	1754
			37.39	29513313	Pentadecane, 2,6,10,14-tetramethyl	559	23321938	Pentadecane, 2,6,10,14-tetramethyl-	458	1921-70-6	508
			38.15	10747402	Hexadecane, 7-methyl-	203					
							8227037	Decane, 5-propyl-	161	17312-62-8	81
			38.23	7162018		136	5661012		111		
			38.47	7763119	Heptadecane, 4-methyl-	147	5858892	Heptadecane, 4-methyl-	115	26429-11-8	131
							9460375	Heptadecane, 2-methyl-	186	1560-89-0	93
			38.60	12229093	Heptadecane, 9-hexyl-	231					
38.76	9394580	Heptadecane, 3-methyl-	178	7293671	Heptadecane, 3-methyl-	143	6418-44-6	160			
39.35	67907177	Octadecane	1285	52421317	Octadecane	1028	593-45-3	1157			
39.67	27306738	Hexadecane, 2,6,10,14-tetramethyl-	517	21150267	Hexadecane, 2,6,10,14-tetramethyl-	415	638-36-8	466			

Table 1

R-1-6	表	25℃	4.79	35569786	Acetic acid	706	37856722	Acetic acid	757	64-19-7	732			
			6.27	30732109	1-Butanol	610	26170871	1-Butanol	523	71-36-3	567			
			9.27	5035252	Toluene-D8	100	5003624	Toluene-D8	100	2037-26-5	100			
			9.39	10226552	Toluene	203	8745283	Toluene	175	108-88-3	189			
			10.57	39087093	Acetic acid, butyl ester	776	33187700	Acetic acid, butyl ester	663	123-86-4	720			
			11.83	13237080	2-Pentanol, acetate	263	11520237	2-Pentanol, acetate	230	626-38-0	247			
			13.32	8317742	2-Propenoic acid, butyl ester	165	7043387	2-Propenoic acid, butyl ester	141	141-32-2	153			
			13.75	55157903	<a href="#">Ethanol, 2-butoxy-</a>	1095	50131992	<a href="#">Ethanol, 2-butoxy-</a>	1002	111-76-2	1049			
			17.62	19010932	Decane	378	16336455	Decane	326	124-18-5	352			
			18.07	10309979	<a href="#">1-Hexanol, 2-ethyl-</a>	205	9722221	<a href="#">1-Hexanol, 2-ethyl-</a>	194	104-76-7	200			
			24.06	5284510	Dodecane	105					52			
			32.36	5304747	Pentadecane	105	5171149	Pentadecane	103	629-62-9	104			
			34.83	14292609	Hexadecane	284	14100757	Hexadecane	282	544-76-3	283			
			37.15	21726234	Heptadecane	431	20886677	Heptadecane	417	629-78-7	424			
			37.39	6151247	Pentadecane, 2,6,10,14-tetramethyl	122	5777509	Hexadecane, 2,6,10,14-tetramethyl-	115	638-36-8	119			
			39.35	12467034	Octadecane	248	11621160	Octadecane	232	593-45-3	240			
			R-1-6	表	40℃	4.82	62352361	Acetic acid	876	74944767	Acetic acid	1246	64-19-7	1061
						6.26	29171197	1-Butanol	410	31616258	1-Butanol	526	71-36-3	468
						9.26	7119293	Toluene-D8	100	6016084	Toluene-D8	100	2037-26-5	100
9.39	7684201	Toluene				108	7964090	Toluene	132	108-88-3	120			
10.55	30267120	Acetic acid, butyl ester				425	33196730	Acetic acid, butyl ester	552	123-86-4	488			
11.82	13364683	2-Pentanol, acetate				188	13935200	2-Pentanol, acetate	232	626-38-0	210			
13.31	8331698	2-Propenoic acid, butyl ester				117	8953027	2-Propenoic acid, butyl ester	149	141-32-2	133			
13.74	81056192	<a href="#">Ethanol, 2-butoxy-</a>				1139	85153942	<a href="#">Ethanol, 2-butoxy-</a>	1415	111-76-2	1277			
17.60	32693985	Decane				459	32843518	Decane	546	124-18-5	503			
18.07	35310975	<a href="#">1-Hexanol, 2-ethyl-</a>				496	33758964	<a href="#">1-Hexanol, 2-ethyl-</a>	561	104-76-7	529			
20.44	7737932	Nonanal				109	7338838	Nonanal	122	124-19-6	115			
24.06	20304867	Dodecane				285	19832119	Dodecane	330	112-40-3	307			
24.55	8365999					118	7498946		125		121			
29.76	8766918	Tetradecane				123	8020446	Tetradecane	133	629-59-4	128			
32.36	28781351	Pentadecane				404	25293849	Pentadecane	420	629-62-9	412			
33.80	8940856					126	7737516		129		127			
34.15	7537438	Pentadecane, 3-methyl-				106	6641731	Pentadecane, 3-methyl-	110	2882-96-4	108			
34.82	78363150	Hexadecane				1101	68286549	Hexadecane	1135	544-76-3	1118			
35.91	12836610	Hexadecane, 7-methyl-				180	11658836	Hexadecane, 7-methyl-	194	26730-20-1	187			
36.06	23342466	Pentadecane, 2,6,10-trimethyl-				328	20373005	Pentadecane, 2,6,10-trimethyl-	339	3892-00-0	333			
36.20	8490311	Hexadecane, 4-methyl-				119	7007954	Hexadecane, 4-methyl-	116	25117-26-4	118			
36.32	15373274	Hexadecane, 2-methyl-				216	12792223	Hexadecane, 2-methyl-	213	1560-92-5	214			
36.52	17699623	Hexadecane, 3-methyl-				249	15520635	Hexadecane, 3-methyl-	258	6418-43-5	253			
37.15	117715412	Heptadecane				1653	103404787	Heptadecane	1719	629-78-7	1686			
37.38	33395838	Pentadecane, 2,6,10,14-tetramethyl				469	30408972	Pentadecane, 2,6,10,14-tetramethyl-	505	1921-70-6	487			
38.14	12098071	Decane, 5-propyl-				170					85			
							11070606	Hexadecane, 7-methyl-	184	26730-20-1	92			

Table 1

			38.22	8307673		117	7327975		122		119
			38.46	8453521	Heptadecane, 4-methyl-	119	7788656	Heptadecane, 4-methyl-	129	26429-11-8	124
			38.58	13559319	Heptadecane, 2-methyl-	190	12291831	Heptadecane, 2-methyl-	204	1560-89-0	197
			38.76	10583509	Heptadecane, 3-methyl-	149	9375718	Heptadecane, 3-methyl-	156	6418-44-6	152
			39.35	75441192	Octadecane	1060	68328731	Octadecane	1136	593-45-3	1098
			39.67	28514551	Hexadecane, 2,6,10,14-tetramethyl-	401	26535439	Hexadecane, 2,6,10,14-tetramethyl-	441	638-36-8	421
R-1-7	裏	25°C	6.27	61231969	1-Butanol	1065	62192227	1-Butanol	1078	71-36-3	1071
			9.27	5750645	Toluene-D8	100	5768436	Toluene-D8	100	2037-26-5	100
			10.73	9913999	Octane	172	9938808	Octane	172	111-65-9	172
			13.47	24239074	Styrene	422	24753265	Styrene	429	100-42-5	425
			17.62	39216100	Decane	682	40087990	Decane	695	124-18-5	688
			24.06	7020561	Dodecane	122	7428088	Dodecane	129	112-40-3	125
R-1-7	裏	40°C	4.69	9148690	Acetic acid	130	9564121	Acetic acid	137	64-19-7	133
			6.27	74336229	1-Butanol	1056	74208668	1-Butanol	1060	71-36-3	1058
			9.27	7040895	Toluene-D8	100	7001619	Toluene-D8	100	2037-26-5	100
			10.73	9407168	Octane	134	8954343	Octane	128	111-65-9	131
			13.47	42609712	Styrene	605	43251640	Styrene	618	100-42-5	611
			17.62	39209782	Decane	557	39424517	Decane	563	124-18-5	560
			18.07	9236454	1-Hexanol, 2-ethyl-	131	9310540	1-Hexanol, 2-ethyl-	133	104-76-7	132
24.06	11238759	Dodecane	160	11720286	Dodecane	167	112-40-3	164			
R-1-7	表	25°C	6.27	63561093	1-Butanol	1138	64707491	1-Butanol	1149	71-36-3	1144
			9.27	5586340	Toluene-D8	100	5630471	Toluene-D8	100	2037-26-5	100
			10.73	9601974	Octane	172	9864067	Octane	175	111-65-9	174
			13.47	25789197	Styrene	462	26901961	Styrene	478	100-42-5	470
			17.62	40746654	Decane	729	42124442	Decane	748	124-18-5	739
			24.06	8387205	Dodecane	150	8359799	Dodecane	148	112-40-3	149
R-1-7	表	40°C	4.69	8451060	Acetic acid	132	7140597	Acetic acid	112	64-19-7	122
			6.27	71746926	1-Butanol	1123	73491987	1-Butanol	1154	71-36-3	1138
			9.27	6390941	Toluene-D8	100	6367230	Toluene-D8	100	2037-26-5	100
			10.73	8659481	Octane	135	8880231	Octane	139	111-65-9	137
			13.47	43256021	Styrene	677	41475476	Styrene	651	100-42-5	664
			17.62	39133109	Decane	612	38624722	Decane	607	124-18-5	609
			18.07	8812218	1-Hexanol, 2-ethyl-	138	8130348	1-Hexanol, 2-ethyl-	128	104-76-7	133
			24.06	11609564	Dodecane	182	10811569	Dodecane	170	112-40-3	176
R-1-8	裏	25°C	9.25	5238027	Toluene-D8	100	5219098	Toluene-D8	100	2037-26-5	100
			17.59	8237957	Decane	157	7765539	Decane	149	124-18-5	153
R-1-8	裏	40°C	9.26	5152568	Toluene-D8	100	5287037	Toluene-D8	100	2037-26-5	100
			17.60	15111080	Decane	293	15499061	Decane	293	124-18-5	293
			24.04	10626318	Dodecane	206	11037385	Dodecane	209	112-40-3	207
			28.82	7740590	Propanoic acid, 2-methyl-, 3-hydrox	150	7645495	Propanoic acid, 2-methyl-, 3-hydroxy-	145	77-68-9	147
R-1-8	表	25°C	9.26	5318990	Toluene-D8	100	5270682	Toluene-D8	100	2037-26-5	100
			17.60	8849419	Decane	166	8621232	Decane	164	124-18-5	165
R-1-8	表	40°C	9.26	4488312	Toluene-D8	100	4936903	Toluene-D8	100	2037-26-5	100



Table 1

			17.60	13625191	Decane	304	14335505	Decane	290	124-18-5	297
			24.04	9624965	Dodecane	214	9970628	Dodecane	202	112-40-3	208
			28.82	7513517	Propanoic acid, 2-methyl-, 3-hydrox	167	7204819	Propanoic acid, 2-methyl-, 3-hydroxy-	146	77-68-9	157
R-1-9	裏	25°C	9.26	5112495	Toluene-D8	100	5043232	Toluene-D8	100	2037-26-5	100
R-1-9	裏	40°C	9.26	5166986	Toluene-D8	100	5202124	Toluene-D8	100	2037-26-5	100
R-1-9	表	25°C	9.26	5360196	Toluene-D8	100	5157634	Toluene-D8	100	2037-26-5	100
R-1-9	表	40°C	9.26	5009653	Toluene-D8	100	5114127	Toluene-D8	100	2037-26-5	100
R-1-10	裏	25°C	9.25	5031077	Toluene-D8	100	4969757	Toluene-D8	100	2037-26-5	100
R-1-10	裏	40°C	9.25	5084441	Toluene-D8	100	5127564	Toluene-D8	100	2037-26-5	100
R-1-10	表	40°C	9.25	5013019	Toluene-D8	100	5062698	Toluene-D8	100	2037-26-5	100
R-1-10	表	25°C	9.25	5143279	Toluene-D8	100	5062103	Toluene-D8	100	2037-26-5	100
R-1-11	裏	25°C	9.25	6438303	Toluene-D8	100	6381425	Toluene-D8	100	2037-26-5	100
R-1-11	裏	40°C	9.25	6227827	Toluene-D8	100	6369257	Toluene-D8	100	2037-26-5	100
			37.36	6442291	Pentadecane, 2,6,10,14-tetramethyl	103	6690706	Pentadecane, 2,6,10,14-tetramethyl-	105	1921-70-6	104
			39.64	15402611	Hexadecane, 2,6,10,14-tetramethyl-	247	15173349	Hexadecane, 2,6,10,14-tetramethyl-	238	638-36-8	243
R-1-11	表	25°C	9.25	6407846	Toluene-D8	100	6438494	Toluene-D8	100	2037-26-5	100
R-1-11	表	40°C	9.25	5445524	Toluene-D8	100	5863135	Toluene-D8	100	2037-26-5	100
			37.36	5747478	Pentadecane, 2,6,10,14-tetramethyl	106	5954589	Pentadecane, 2,6,10,14-tetramethyl-	102	1921-70-6	104
			39.66	14534973	Hexadecane, 2,6,10,14-tetramethyl-	267	14436583	Hexadecane, 2,6,10,14-tetramethyl-	246	638-36-8	257
R-1-12	裏	25°C	9.25	6501192	Toluene-D8	100	6446996	Toluene-D8	100	2037-26-5	100
R-1-12	裏	40°C	9.25	6385326	Toluene-D8	100	6451575	Toluene-D8	100	2037-26-5	100
R-1-12	表	25°C	9.25	6468208	Toluene-D8	100	6473171	Toluene-D8	100	2037-26-5	100
R-1-12	表	40°C	9.25	6189374	Toluene-D8	100	6321007	Toluene-D8	100	2037-26-5	100
R-1-13	裏	25°C	9.26	6541864	Toluene-D8	100	6563557	Toluene-D8	100	2037-26-5	100
			24.04	6861682	Dodecane	105	8515880	Dodecane	130	112-40-3	117
R-1-13	裏	40°C	9.25	6625126	Toluene-D8	100	6686286	Toluene-D8	100	2037-26-5	100
			24.03	14650102	Dodecane	221	15089402	Dodecane	226	112-40-3	223
R-1-13	表	40°C	9.25	6372254	Toluene-D8	100	6588531	Toluene-D8	100	2037-26-5	100
			24.03	13949433	Dodecane	219	6707904	Decane	102	124-18-5	160
							15468186	Dodecane	235	112-40-3	117
R-1-13	表	25°C	9.25	6701190	Toluene-D8	100	6591118	Toluene-D8	100	2037-26-5	100
			24.03	7807714	Dodecane	117	8010474	Dodecane	122	112-40-3	119
R-1-14	裏	25°C	9.25	7030811	Toluene-D8	100	6924614	Toluene-D8	100	2037-26-5	100
R-1-14	裏	40°C	9.25	6947271	Toluene-D8	100	6900739	Toluene-D8	100	2037-26-5	100
			24.03	8804874	Dodecane	127	18867971	Decane	273	124-18-5	200
							38248618	Dodecane	554	112-40-3	277
							10801591	Tetradecane	157	629-59-4	78
R-1-14	表	25°C	9.25	6994536	Toluene-D8	100	6937618	Toluene-D8	100	2037-26-5	100
			17.59	8265048	Decane	118	8768828	Decane	126	124-18-5	122
			24.03	12065643	Dodecane	173	13440335	Dodecane	194	112-40-3	183
R-1-14	表	40°C	9.25	6213629	Toluene-D8	100	6213629	Toluene-D8	100	2037-26-5	100
			17.59	13499687	Decane	217	18490847	Decane	279	124-18-5	248
							6792932	1-Hexanol, 2-ethyl-	101	104-76-7	

Table 1

			24.04	27973038	Dodecane	450	37786698	Dodecane	561	112-40-3	506
			29.74	6868051	Tetradecane	111	9186822	Tetradecane	136	629-59-4	123
R-1-15	裏	25°C	6.26	10649945	1-Butanol	153	9906053	1-Butanol	142	71-36-3	147
			9.26	6978225	Toluene-D8	100	6996324	Toluene-D8	100	2037-26-5	100
			17.59	13685059	Decane	196	12824047	Decane	183	124-18-5	190
			18.06	9298700	<a href="#">1-Hexanol, 2-ethyl-</a>	133	9105860	<a href="#">1-Hexanol, 2-ethyl-</a>	130	104-76-7	132
			24.04	7090766	Dodecane	102					
R-1-15	裏	40°C	6.26	22881739	1-Butanol	327	21772416	1-Butanol	311	71-36-3	319
			9.26	7000787	Toluene-D8	100	7009137	Toluene-D8	100	2037-26-5	100
			17.60	30333325	Decane	433	28955952	Decane	413	124-18-5	423
			18.06	31156545	<a href="#">1-Hexanol, 2-ethyl-</a>	445	30808815	<a href="#">1-Hexanol, 2-ethyl-</a>	440	104-76-7	442
			24.04	16559805	Dodecane	237	16094140	Dodecane	230	112-40-3	233
R-1-15	表	25°C	6.26	9277630	1-Butanol	130	10355286	1-Butanol	147	71-36-3	138
			9.26	7158655	Toluene-D8	100	7039902	Toluene-D8	100	2037-26-5	100
			17.60	10970083	Decane	153	13065192	Decane	186	124-18-5	169
			18.06	8327563	<a href="#">1-Hexanol, 2-ethyl-</a>	116	9967196	<a href="#">1-Hexanol, 2-ethyl-</a>	142	104-76-7	129
R-1-15	表	40°C	6.26	20117598	1-Butanol	298	16037699	1-Butanol	229	71-36-3	264
			9.25	6748126	Toluene-D8	100	6990515	Toluene-D8	100	2037-26-5	100
			17.59	27227480	Decane	403	2077583	Decane	297	124-18-5	350
			18.04	29226941	<a href="#">1-Hexanol, 2-ethyl-</a>	433	20255203	<a href="#">1-Hexanol, 2-ethyl-</a>	290	104-76-7	361
			24.03	15526546	Dodecane	230	9508656	Dodecane	136	112-40-3	183
R-1-16	裏	25°C	4.83	10107521	2-Butanone	161	8368382	2-Butanone	133	78-93-3	147
			6.53	9868095	2-Propanol, 1-methoxy-	157	7550340	2-Propanol, 1-methoxy-	120	107-98-2	138
			7.51	9059295	n-Propyl acetate	144	7322296	n-Propyl acetate	116	109-60-4	130
			9.26	6297229	Toluene-D8	100	6289037	Toluene-D8	100	2037-26-5	100
			9.39	232196873	Toluene	3687	213167307	Toluene	3390	108-88-3	3538
			10.71	8917841	Octane	142	7418111	Octane	118	111-65-9	130
			17.59	47942815	Decane	761	41016950	Decane	652	124-18-5	707
			18.04	9742763	<a href="#">1-Hexanol, 2-ethyl-</a>	155	8341115	<a href="#">1-Hexanol, 2-ethyl-</a>	133	104-76-7	144
			22.42	103611376	<a href="#">Ethanol, 2-(2-ethoxyethoxy)-, aceta</a>	1645	94978315	<a href="#">Ethanol, 2-(2-ethoxyethoxy)-, acetate</a>	1510	112-15-2	1578
			24.04	14724988	Dodecane	234	13185587	Dodecane	210	112-40-3	222
			24.43	23113006	<a href="#">2-Ethylhexyl acrylate</a>	367	20614087	<a href="#">2-Ethylhexyl acrylate</a>	328	103-11-7	347
R-1-16	裏	40°C	4.85	20739583	2-Butanone	316	18274890	2-Butanone	286	78-93-3	301
			5.22	6713019	Ethyl Acetate	102					
			6.54	23492161	2-Propanol, 1-methoxy-	358	21185074	2-Propanol, 1-methoxy-	332	107-98-2	345
			7.51	17424234	n-Propyl acetate	265	16094807	n-Propyl acetate	252	109-60-4	259
			9.26	6564891	Toluene-D8	100	6380860	Toluene-D8	100	2037-26-5	100
			9.41	297232193	<a href="#">Toluene</a>	4528	285647782	<a href="#">Toluene</a>	4477	108-88-3	4502
			10.71	12904897	Octane	197	12016777	Octane	188	111-65-9	192
			12.17	15644430	1-Methoxy-2-propyl acetate	238	13964818	1-Methoxy-2-propyl acetate	219	108-65-6	229
			12.82	9096718	Benzene, 1,3-dimethyl-	139	8194443	Benzene, 1,3-dimethyl-	128	108-38-3	133
			13.71	7181366	Ethanol, 2-butoxy-	109					
			17.59	63482871	Decane	967	57369869	Decane	899	124-18-5	933

Table 1

			18.04	33598489	1-Hexanol, 2-ethyl-	512	29543386	1-Hexanol, 2-ethyl-	463	104-76-7	487
			22.46	300176304	Ethanol, 2-(2-ethoxyethoxy)-, aceta	4572	281061731	Ethanol, 2-(2-ethoxyethoxy)-, acetate	4405	112-15-2	4489
			24.03	28169639	Dodecane	429	24267324	Dodecane	380	112-40-3	405
			24.43	74058004	2-Ethylhexyl acrylate	1128	65533371	2-Ethylhexyl acrylate	1027	103-11-7	1078
			32.48	6805023	Butylated Hydroxytoluene	104					
			33.02	13027200	1,6-Dioxacyclododecane-7,12-dione	198	12930502	1,6-Dioxacyclododecane-7,12-dione	203	777-95-7	201
			36.54	10818274		165	9464674		148		157
R-1-16	表	40°C	4.85	21259520	2-Butanone	319	18689692	2-Butanone	279	78-93-3	299
			6.54	22710963	2-Propanol, 1-methoxy-	341	19119313	2-Propanol, 1-methoxy-	285	107-98-2	313
			7.51	17146862	n-Propyl acetate	257	15187363	n-Propyl acetate	227	109-60-4	242
			9.26	6659290	Toluene-D8	100	6704757	Toluene-D8	100	2037-26-5	100
			9.41	298004229	Toluene	4475	284468733	Toluene	4243	108-88-3	4359
			10.71	12439288	Octane	187	12467280	Octane	186	111-65-9	186
			12.17	15112029	1-Methoxy-2-propyl acetate	227	13112711	1-Methoxy-2-propyl acetate	196	108-65-6	211
			12.82	9116751	Benzene, 1,3-dimethyl-	137	8497506	Benzene, 1,3-dimethyl-	127	108-38-3	132
			13.71	8800113	Ethanol, 2-butoxy-	132	7245286	Ethanol, 2-butoxy-	108	111-76-2	120
			16.92	8623746	Propanenitrile, 2,2'-azobis[2-methyl-	129	7534063	Propanenitrile, 2,2'-azobis[2-methyl-	112	78-67-1	121
			17.59	60885999	Decane	914	58402307	Decane	871	124-18-5	893
			18.06	42829815	1-Hexanol, 2-ethyl-	643	36688432	1-Hexanol, 2-ethyl-	547	104-76-7	595
			21.98	6833442	Acetic acid, 2-ethylhexyl ester	103					
			22.47	388554458	Ethanol, 2-(2-ethoxyethoxy)-, aceta	5835	337219146	Ethanol, 2-(2-ethoxyethoxy)-, acetate	5030	112-15-2	5432
			24.03	28235015	Dodecane	424	23178290	Dodecane	346	112-40-3	385
			24.43	85476950	2-Ethylhexyl acrylate	1284	71360769	2-Ethylhexyl acrylate	1064	103-11-7	1174
			32.48	7375930	Butylated Hydroxytoluene	111					
33.02	16806962	1,6-Dioxacyclododecane-7,12-dione	252	14093047	1,6-Dioxacyclododecane-7,12-dione	210	777-95-7	231			
36.54	19894740		299	12239898		183		241			
R-1-16	表	25°C	4.85	10625979	2-Butanone	168	10157544	2-Butanone	161	78-93-3	165
			6.54	10139122	2-Propanol, 1-methoxy-	160	10179769	2-Propanol, 1-methoxy-	162	107-98-2	161
			7.51	9258121	n-Propyl acetate	146	9054453	n-Propyl acetate	144	109-60-4	145
			9.26	6330231	Toluene-D8	100	6290054	Toluene-D8	100	2037-26-5	100
			9.39	235486629	Toluene	3720	230984890	Toluene	3672	108-88-3	3696
			10.71	8964256	Octane	142	8685414	Octane	138	111-65-9	140
			12.17	6439079	1-Methoxy-2-propyl acetate	102	6453759	1-Methoxy-2-propyl acetate	103	108-65-6	102
			17.59	41980355	Decane	663	40212649	Decane	639	124-18-5	651
			18.04	16547092	1-Hexanol, 2-ethyl-	261	16648374	1-Hexanol, 2-ethyl-	265	104-76-7	263
			22.43	187651098	Ethanol, 2-(2-ethoxyethoxy)-, aceta	2964	191390473	Ethanol, 2-(2-ethoxyethoxy)-, acetate	3043	112-15-2	3004
			24.03	13068624	Dodecane	206	12276039	Dodecane	195	112-40-3	201
24.43	24863645	2-Ethylhexyl acrylate	393	24228638	2-Ethylhexyl acrylate	385	103-11-7	389			
R-1-17	裏	25°C	9.27	4796880	Toluene-D8	100	4815928	Toluene-D8	100	2037-26-5	100
R-1-17	裏	40°C	9.27	4686360	Toluene-D8	100	4778667	Toluene-D8	100	2037-26-5	100
R-1-17	表	25°C	9.26	4868206	Toluene-D8	100	4844122	Toluene-D8	100	2037-26-5	100
R-1-17	表	40°C	9.26	4431185	Toluene-D8	100	4597172	Toluene-D8	100	2037-26-5	100
R-1-18	裏	25°C	9.26	5633184	Toluene-D8	100	5695922	Toluene-D8	100	2037-26-5	100

Table 1

R-1-18	裏	40℃	9.26	5462359	Toluene-D8	100	5609193	Toluene-D8	100	2037-26-5	100
R-1-18	表	25℃	9.26	5715249	Toluene-D8	100	5720051	Toluene-D8	100	2037-26-5	100
R-1-18	表	40℃	9.26	4610665	Toluene-D8	100	5181172	Toluene-D8	100	2037-26-5	100
			37.14	4725435	Heptadecane	102					
R-1-19	裏	25℃	6.26	20915001	1-Butanol	392	19691444	1-Butanol	368	71-36-3	380
			9.26	5340574	Toluene-D8	100	5355967	Toluene-D8	100	2037-26-5	100
			17.62	12638264	Decane	237	12715710	Decane	237	124-18-5	237
			20.92	6492256	Undecane	122	6461781	Undecane	121	1120-21-4	121
			24.06	6373360	Dodecane	119	6455723	Dodecane	121	112-40-3	120
			26.99	7534406	Tridecane	141	7237244	Tridecane	135	629-50-5	138
			29.75	10846886	Tetradecane	203	10187891	Tetradecane	190	629-59-4	197
			32.36	10676820	Pentadecane	200	9911398	Pentadecane	185	629-62-9	192
			34.82	7036436	Hexadecane	132	6395005	Hexadecane	119	544-76-3	126
R-1-19	裏	40℃	6.26	43348895	1-Butanol	804	42003477	1-Butanol	781	71-36-3	793
			9.26	5391781	Toluene-D8	100	5376211	Toluene-D8	100	2037-26-5	100
			10.71	6238897	Octane	116	6614972	Octane	123	111-65-9	119
			17.43	12279673		228	13290988		247		237
			17.60	29991145	Decane	556	30756961	Decane	572	124-18-5	564
			18.44	8121884		151	8515229		158		155
			18.59	5443178		101	5583192		104		102
			18.86	9186839		170	9006500		168		169
			19.23	7909228	1H-Indene, octahydro-5-methyl-	147	7586034	1H-Indene, octahydro-5-methyl-	141	19744-64-0	144
			19.79	14583023	Cyclohexanol, 2-butyl-,	270	15008959	Cyclohexanol, 2-butyl-,	279	36159-49-6	275
			20.92	19985260	Undecane	371	19887448	Undecane	370	1120-21-4	370
			22.71	15550735	Cyclopentasiloxane, decamethyl-	288	16635561	Cyclopentasiloxane, decamethyl-	309	541-02-6	299
			24.04	20335592	Dodecane	377	19644857	Dodecane	365	112-40-3	371
			26.99	23957409	Tetradecane	444	23957741	Tetradecane	446	629-59-4	445
			27.94	5605240	Cyclohexasiloxane, dodecamethyl-	104	5849056	Cyclohexasiloxane, dodecamethyl-	109	540-97-6	106
			28.79	6612996	Propanoic acid, 2-methyl-, 3-hydrox	123	6488352	Propanoic acid, 2-methyl-, 3-hydroxy-	121	77-68-9	122
			29.75	35247050	Tetradecane	654	36283452	Tetradecane	675	629-59-4	664
			31.46	6824642	Hexadecane	127					
							6929688	Pentadecane	129	629-62-9	
			32.36	38364438	Pentadecane	712	40355143	Pentadecane	751	629-62-9	731
			34.82	30280468	Hexadecane	562	31364108	Hexadecane	583	544-76-3	572
			37.14	19051959	Heptadecane	353	19254259	Heptadecane	358	629-78-7	356
			39.35	8839964	Octadecane	164	8534169	Octadecane	159	593-45-3	161
R-1-19	表	25℃	6.26	28776140	1-Butanol	534	29159167	1-Butanol	541	71-36-3	537
			9.26	5390812	Toluene-D8	100	5393087	Toluene-D8	100	2037-26-5	100
			17.43	8001969		148	7931076		147		148
			17.60	24003530	Decane	445	23533489	Decane	436	124-18-5	441
			18.44	5520961		102	5460306		101		102
			18.86	6356615		118	6034110		112		115
			19.23	5931977	Bicyclo[5.3.0]decane (cis)	110	5924654	Bicyclo[5.3.0]decane	110	5661-80-3	110

Table 1

			19.79	10048302	Cyclohexanol, 2-butyl-,	186	10378772	Cyclohexanol, 2-butyl-,	192	36159-49-6	189
			20.92	14445663	Undecane	268	14210914	Undecane	264	1120-21-4	266
			22.71	13513351	Cyclopentasiloxane, decamethyl-	251	13279666	Cyclopentasiloxane, decamethyl-	246	541-02-6	248
			24.06	14138521	Dodecane	262	14209868	Dodecane	263	112-40-3	263
			26.99	14036960	Tetradecane	260	14330927	Tetradecane	266	629-59-4	263
			27.94	8003482	Cyclohexasiloxane, dodecamethyl-	148	8078149	Cyclohexasiloxane, dodecamethyl-	150	540-97-6	149
			29.75	15818746	Tetradecane	293	16491975	Tetradecane	306	629-59-4	300
			32.36	12841461	Pentadecane	238	13530577	Pentadecane	251	629-62-9	245
			34.82	7743478	Hexadecane	144	8213657	Hexadecane	152	544-76-3	148
R-1-19	表	40°C	6.26	57493132	1-Butanol	1066	58057747	1-Butanol	1054	71-36-3	1060
			9.26	5391215	Toluene-D8	100	5509981	Toluene-D8	100	2037-26-5	100
			10.73	7852976	Octane	146	7997845	Octane	145	111-65-9	145
			16.42	6779648		126	6809434		124		125
			16.98	5637014	Cyclohexane, 1,2-diethyl-, cis-	105	5644369	Cyclohexane, 1,2-diethyl-, cis-	102	824-43-1	103
			17.22	8550250	Cyclohexane, 1-methyl-2-propyl-	159	8165655	Cyclohexane, 1-methyl-2-propyl-	148	4291-79-6	153
			17.44	22809454		423	21323071		387		405
			17.62	51175496	Decane	949	49512012	Decane	899	124-18-5	924
			17.80	7823686	Cyclopentane, 1,2-dimethyl-3-(1-methyl-2-propyl)-	145	7537848	Cyclopentane, 1,2-dimethyl-3-(1-methyl-2-propyl)-	137	489-20-3	141
			18.07	7576709		141	8339810		151		146
			18.16	8376868		155	5538213		101		128
			18.24	5908847		110	14757398		268		189
			18.44	15790273		293	10199186		185		239
			18.59	9761411		181	16772688		304		243
			18.68	5629825		104	7600362		138		121
			18.84	16984990		315	7983712		145		230
			18.96	7805709		145					
			19.06	8492271		158					
			19.23	15450993	1H-Indene, octahydro-5-methyl-	287	14698340	1H-Indene, octahydro-5-methyl-	267	19744-64-0	277
			19.43	9236449		171	9034636		164		168
			19.56	9807596		182	9530776	1-Heptanol, 2,4-diethyl-	173	80192-55-8	177
			19.71	6513053		121	5765548		105		113
			19.80	29521725	Cyclohexanol, 2-butyl-,	548	27325304	Cyclohexanol, 2-butyl-,	496	36159-49-6	522
			20.00	10196478	Decane, 3-methyl-	189	9672677	Decane, 3-methyl-	176	13151-34-3	182
			20.59	7455890		138	7067104		128		133
			20.92	37043834	Undecane	687	35532703	Undecane	645	1120-21-4	666
			21.54	10032196		186	9763622		177		182
			21.67	8636692	trans-Decalin, 2-methyl-	160	8063171	trans-Decalin, 2-methyl-	146	n/a	153
			22.22	8680463	trans-Decalin, 2-methyl-	161	7807556	trans-Decalin, 2-methyl-	142	n/a	151
			22.71	37353858	Cyclopentasiloxane, decamethyl-	693	35189897	Cyclopentasiloxane, decamethyl-	639	541-02-6	666
			24.06	36645629	Dodecane	680	36156899	Dodecane	656	112-40-3	668
			24.54	5616178	Undecane, 2,6-dimethyl-	104					
			26.99	41084011	Tetradecane	762					
				37546854	Tridecane	681	629-50-5	341			

Table 1

			27.94	19740915	Cyclohexasiloxane, dodecamethyl-	366	18086169	Cyclohexasiloxane, dodecamethyl-	328	540-97-6	347
			28.83	7676193		142	7606383		138		140
			29.22	7535214	Hexadecane, 2,6,10,14-tetramethyl-	140	6755182	Hexadecane, 2,6,10,14-tetramethyl-	123	638-36-8	131
			29.76	51994487	Tetradecane	964	47064682	Tetradecane	854	629-59-4	909
			31.47	10226862	Hexadecane	190	9225736	Hexadecane	167	544-76-3	179
			32.36	49055060	Pentadecane	910	43654436	Pentadecane	792	629-62-9	851
			34.82	34631690	Hexadecane	642	31306442	Hexadecane	568	544-76-3	605
			37.14	20884892	Heptadecane	387	19069354	Heptadecane	346	629-78-7	367
			39.35	9200076	Eicosane	171	8925639	Eicosane	162	112-95-8	166
R-1-20	裏	25℃	6.27	6413614	1-Butanol	101					
			9.29	6374947	Toluene-D8	100	5706305	Toluene-D8	100	2037-26-5	100
			17.63	7920651	Decane	124	7287773	Decane	128	124-18-5	126
			18.08	15407149	<a href="#">1-Hexanol, 2-ethyl-</a>	242	14735777	<a href="#">1-Hexanol, 2-ethyl-</a>	258	104-76-7	250
			24.07	13185313	Dodecane	207	12372923	Dodecane	217	112-40-3	212
			36.40	16818581	1,4-Methanobenzocyclododecene, 1,2,	264	16029544	1,4-Methanobenzocyclododecene, 1,2,3,	281	74708-73-9	272
R-1-20	裏	40℃	9.29	5569722	Toluene-D8	100	5686879	Toluene-D8	100	2037-26-5	100
			16.96	6252410	Propanenitrile, 2,2'-azobis[2-methyl-	112	5954925	Propanenitrile, 2,2'-azobis[2-methyl-	105	78-67-1	108
			17.63	8486423	Decane	152	8345654	Decane	147	124-18-5	150
			18.08	28200819	<a href="#">1-Hexanol, 2-ethyl-</a>	506	26716936	<a href="#">1-Hexanol, 2-ethyl-</a>	470	104-76-7	488
			24.07	16747467	Dodecane	301	15622663	Dodecane	275	112-40-3	288
			24.47	7762248	<a href="#">2-Ethylhexyl acrylate</a>	139	7172423	<a href="#">2-Ethylhexyl acrylate</a>	126	103-11-7	133
			32.51	12022573	Butylated Hydroxytoluene	216	11149131	Butylated Hydroxytoluene	196	128-37-0	206
			33.06	9206750	1,6-Dioxacyclododecane-7,12-dione	165	8357158	1,6-Dioxacyclododecane-7,12-dione	147	777-95-7	156
			34.74	7277299		131	6311092		111		121
			34.84	8878880		159	8384591		147		153
	36.40	27594145	1,4-Methanobenzocyclododecene, 1,2,	495	26095166	1,4-Methanobenzocyclododecene, 1,2,3,	459	74708-73-9	477		
R-1-20	表	25℃					6727448	1-Butanol	118	71-36-3	
			9.29	5724078	Toluene-D8	100	5706783	Toluene-D8	100	2037-26-5	100
			17.63	6589614	Decane	115	8285618	Decane	145	124-18-5	130
			18.08	14093600	<a href="#">1-Hexanol, 2-ethyl-</a>	246	16264810	<a href="#">1-Hexanol, 2-ethyl-</a>	285	104-76-7	266
			24.07	10720901	Dodecane	187	13783909	Dodecane	242	112-40-3	214
			36.40	16288957	1,4-Methanobenzocyclododecene, 1,2,	285	17100240	1,4-Methanobenzocyclododecene, 1,2,3,	300	74708-73-9	292
R-1-20	表	40℃	6.27	4968925	1-Butanol	105	5413272	1-Butanol	102	71-36-3	104
			9.29	4728903	Toluene-D8	100	5307612	Toluene-D8	100	2037-26-5	100
			16.96	5361418	Propanenitrile, 2,2'-azobis[2-methyl-	113	5762231	Propanenitrile, 2,2'-azobis[2-methyl-	109	78-67-1	111
			17.63	8339632	Decane	176	8596373	Decane	162	124-18-5	169
			18.08	25764372	<a href="#">1-Hexanol, 2-ethyl-</a>	545	27658513	<a href="#">1-Hexanol, 2-ethyl-</a>	521	104-76-7	533
			24.07	16566129	Dodecane	350	17414904	Dodecane	328	112-40-3	339
			24.47	7100314	<a href="#">2-Ethylhexyl acrylate</a>	150	7506453	<a href="#">2-Ethylhexyl acrylate</a>	141	103-11-7	146
			32.51	10776908	Butylated Hydroxytoluene	228	11124834	Butylated Hydroxytoluene	210	128-37-0	219
			33.06	8775376	1,6-Dioxacyclododecane-7,12-dione	186	9407898	1,6-Dioxacyclododecane-7,12-dione	177	777-95-7	181
			33.63	4968896		105	6402303		121		113
	34.74	6351459		134	8522458		161		147		

Table 1

			34.83	8288765		175					
			36.39	26847706	1,4-Methanobenzocyclodecene, 1,2,	568	26239144	1,4-Methanobenzocyclodecene, 1,2,3,	494	74708-73-9	531
R-1-21	裏	25°C	9.26	5800464	Toluene-D8	100	5765323	Toluene-D8	100	2037-26-5	100
							7398263	Argon	128	7440-37-1	64
R-1-21	裏	40°C	9.26	5590911	Toluene-D8	100	5694476	Toluene-D8	100	2037-26-5	100
R-1-21	表	25°C	9.26	5949005	Toluene-D8	100	5759443	Toluene-D8	100	2037-26-5	100
R-1-21	表	40°C	9.26	5324616	Toluene-D8	100	5452778	Toluene-D8	100	2037-26-5	100
R-1-22	裏	25°C	9.26	6248771	Toluene-D8	100	6280806	Toluene-D8	100	2037-26-5	100
R-1-22	裏	40°C	9.26	6060992	Toluene-D8	100	6532989	Toluene-D8	100	2037-26-5	100
R-1-22	表	25°C	9.26	6254811	Toluene-D8	100	6224891	Toluene-D8	100	2037-26-5	100
R-1-22	表	40°C	9.26	5678346	Toluene-D8	100	5812878	Toluene-D8	100	2037-26-5	100
R-1-23	裏	25°C	9.27	6265509	Toluene-D8	100	6205403	Toluene-D8	100	2037-26-5	100
R-1-23	裏	40°C	9.26	6230066	Toluene-D8	100	6337887	Toluene-D8	100	2037-26-5	100
R-1-23	表	25°C	9.26	6347031	Toluene-D8	100	6253346	Toluene-D8	100	2037-26-5	100
R-1-23	表	40°C	9.26	6037210	Toluene-D8	100	6155181	Toluene-D8	100	2037-26-5	100
R-1-24	裏	25°C	4.86	74058602	<a href="#">2-Butanone</a>	1028	72929022	<a href="#">2-Butanone</a>	1006	78-93-3	1017
			6.29	140718387	<a href="#">1-Butanol</a>	1954	138632215	<a href="#">1-Butanol</a>	1912	71-36-3	1933
			9.27	7202174	Toluene-D8	100	7250130	Toluene-D8	100	2037-26-5	100
			9.39	34563719	Toluene	480	33391003	Toluene	461	108-88-3	470
			10.73	10948586	Octane	152	10841468	Octane	150	111-65-9	151
			11.35	52458696	Cyclotrisiloxane, hexamethyl-	728	53380655	Cyclotrisiloxane, hexamethyl-	736	541-05-9	732
			17.43	19969956	Cyclotetrasiloxane, octamethyl-	277	19968579	Cyclotetrasiloxane, octamethyl-	275	556-67-2	276
			17.62	68953253	Decane	957	66915475	Decane	923	124-18-5	940
			18.07	10406372	<a href="#">1-Hexanol, 2-ethyl-</a>	144	10224317	<a href="#">1-Hexanol, 2-ethyl-</a>	141	104-76-7	143
			22.72	18121947	Cyclopentasiloxane, decamethyl-	252	17948421	Cyclopentasiloxane, decamethyl-	248	541-02-6	250
			24.06	18622796	Dodecane	259	18136937	Dodecane	250	112-40-3	254
			27.94	22161709	Cyclohexasiloxane, dodecamethyl-	308	21959807	Cyclohexasiloxane, dodecamethyl-	303	540-97-6	305
R-1-24	裏	40°C	4.86	73708900	<a href="#">2-Butanone</a>	1003	77806848	<a href="#">2-Butanone</a>	1069	78-93-3	1036
			6.29	158101868	<a href="#">1-Butanol</a>	2151	159162762	<a href="#">1-Butanol</a>	2187	71-36-3	2169
							9907801	Silanediol, dimethyl-	136	1066-42-8	68
			9.27	7351585	Toluene-D8	100	7277674	Toluene-D8	100	2037-26-5	100
			9.39	35705134	Toluene	486	36565822	Toluene	502	108-88-3	494
			10.73	10715278	Octane	146	11487736	Octane	158	111-65-9	152
			11.35	64964409	Cyclotrisiloxane, hexamethyl-	884	71817280	Cyclotrisiloxane, hexamethyl-	987	541-05-9	935
			17.44	32645602	Cyclotetrasiloxane, octamethyl-	444	32281999	Cyclotetrasiloxane, octamethyl-	444	556-67-2	444
			17.62	83813531	Decane	1140	84937286	Decane	1167	124-18-5	1154
			18.07	27794249	<a href="#">1-Hexanol, 2-ethyl-</a>	378	27211832	<a href="#">1-Hexanol, 2-ethyl-</a>	374	104-76-7	376
			18.87	11054403	Decane, 2,2-dimethyl-	150	10795292	Decane, 2,2-dimethyl-	148	17302-37-3	149
			19.08	7714294	Octane, 6-ethyl-2-methyl-	105	7450136	Octane, 6-ethyl-2-methyl-	102	62016-19-7	104
			19.18	8447984	Dodecane, 2,7,10-trimethyl-	115	8970179	Dodecane, 2,7,10-trimethyl-	123	74645-98-0	119
			19.59	8729661	Undecane, 3,6-dimethyl-	119	8903003	Undecane, 3,6-dimethyl-	122	17301-28-9	121
			19.74	10805453	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	147	10461439	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	144	62108-31-0	145
			19.83	10307092		140	11061539		152		146

Table 1

			20.38	12677381	Nonane, 3-methyl-5-propyl-	172	12308410	Nonane, 3-methyl-5-propyl-	169	31081-18-2	171
			20.74	11071354	Dodecane, 4,6-dimethyl-	151	9704362	Dodecane, 4,6-dimethyl-	133	61141-72-8	142
			21.08	11029175	Decane, 3,7-dimethyl-	150	10866372	Decane, 3,7-dimethyl-	149	17312-54-8	150
			21.54	12765982	Undecane, 2,6-dimethyl-	174	12158519	Undecane, 2,6-dimethyl-	167	17301-23-4	170
			22.72	30721540	Cyclopentasiloxane, decamethyl-	418	30160764	Cyclopentasiloxane, decamethyl-	414	541-02-6	416
			24.06	44332597	Dodecane	603	44365152	Dodecane	610	112-40-3	606
			27.94	39328052	Cyclohexasiloxane, dodecamethyl-	535	39701601	Cyclohexasiloxane, dodecamethyl-	546	540-97-6	540
			31.32	29216395	1-Dodecanol	397	29296133	1-Dodecanol	403	112-53-8	400
			32.63	17766002	Cycloheptasiloxane, tetradecamethyl-	242	17993252	Cycloheptasiloxane, tetradecamethyl-	247	107-50-6	244
			R-1-24	表	25°C	4.86	68462291	<a href="#">2-Butanone</a>	944	69983281	<a href="#">2-Butanone</a>
6.29	137529473	<a href="#">1-Butanol</a>				1896	139579719	<a href="#">1-Butanol</a>	1938	71-36-3	1917
9.27	7254684	Toluene-D8				100	7202597	Toluene-D8	100	2037-26-5	100
9.39	32427119	Toluene				447	33446888	Toluene	464	108-88-3	456
10.73	10524164	Octane				145	10870364	Octane	151	111-65-9	148
11.35	56081860	Cyclotrisiloxane, hexamethyl-				773	56806669	Cyclotrisiloxane, hexamethyl-	789	541-05-9	781
17.44	20579088	Cyclotetrasiloxane, octamethyl-				284	20982952	Cyclotetrasiloxane, octamethyl-	291	556-67-2	287
17.62	62458080	Decane				861	63919919	Decane	887	124-18-5	874
18.07	9858422	<a href="#">1-Hexanol, 2-ethyl-</a>				136	9623947	<a href="#">1-Hexanol, 2-ethyl-</a>	134	104-76-7	135
22.72	13287438	Cyclopentasiloxane, decamethyl-				183	13456783	Cyclopentasiloxane, decamethyl-	187	541-02-6	185
24.06	14553804	Dodecane	201	14849981	Dodecane	206	112-40-3	203			
27.94	12729722	Cyclohexasiloxane, dodecamethyl-	175	12849216	Cyclohexasiloxane, dodecamethyl-	178	540-97-6	177			
R-1-24	表	40°C	4.86	74200921	<a href="#">2-Butanone</a>	1186	76694484	<a href="#">2-Butanone</a>	1102	78-93-3	1144
			6.29	152349961	<a href="#">1-Butanol</a>	2436	159383657	<a href="#">1-Butanol</a>	2291	71-36-3	2363
							9783277	Silane diol, dimethyl-	141	1066-42-8	70
			9.27	6255337	Toluene-D8	100	6957217	Toluene-D8	100	2037-26-5	100
			9.39	32933881	Toluene	526	36907920	Toluene	530	108-88-3	528
			10.73	10777016	Octane	172	12082798	Octane	174	111-65-9	173
			11.35	65427712	Cyclotrisiloxane, hexamethyl-	1046	70320428	Cyclotrisiloxane, hexamethyl-	1011	541-05-9	1028
			17.44	27137249	Cyclotetrasiloxane, octamethyl-	434	31293493	Cyclotetrasiloxane, octamethyl-	450	556-67-2	442
			17.62	75631678	Decane	1209	85581322	Decane	1230	124-18-5	1220
			18.07	22081221	<a href="#">1-Hexanol, 2-ethyl-</a>	353	24881821	<a href="#">1-Hexanol, 2-ethyl-</a>	358	104-76-7	355
			18.87	9257501	Decane, 2,2-dimethyl-	148	10567625	Decane, 2,2-dimethyl-	152	17302-37-3	150
							7140732	Octane, 6-ethyl-2-methyl-	103	62016-19-7	51
			19.18	6995911	Decane, 2,6,6-trimethyl-	112	7870775	Dodecane, 2,7,10-trimethyl-	113	74645-98-0	112
			19.59	7322021	Undecane, 3,6-dimethyl-	117	7692181	Undecane, 3,6-dimethyl-	111	17301-28-9	114
			19.74	8479433	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	136	9740188	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	140	62108-31-0	138
			19.80	7163987	Nonane, 3-methyl-	115	9181307		132		123
			20.39	9519118	Nonane, 3-methyl-5-propyl-	152	10872439	Nonane, 3-methyl-5-propyl-	156	31081-18-2	154
			20.72	7874843	Dodecane, 4,6-dimethyl-	126	9099328	Dodecane, 4,6-dimethyl-	131	61141-72-8	128
			21.08	8039238	Decane, 3,7-dimethyl-	129	9428933	Decane, 3,7-dimethyl-	136	17312-54-8	132
21.54	8839639	Undecane, 2,6-dimethyl-	141	10081646	Undecane, 2,6-dimethyl-	145	17301-23-4	143			
22.72	18670198	Cyclopentasiloxane, decamethyl-	298	21777972	Cyclopentasiloxane, decamethyl-	313	541-02-6	306			
24.06	33984978	Dodecane	543	38115386	Dodecane	548	112-40-3	546			



Table 1

			27.94	18035028	Cyclohexasiloxane, dodecamethyl-	288	21210338	Cyclohexasiloxane, dodecamethyl-	305	540-97-6	297
			31.32	24370628	1-Dodecanol	390	30675736	1-Dodecanol	441	112-53-8	415
			32.63	9042354	Cycloheptasiloxane, tetradecamethyl-	145	10319769	Cycloheptasiloxane, tetradecamethyl-	148	107-50-6	146
R-1-25	裏	25°C	6.27	107189043	<u>1-Butanol</u>	1427	107981951	<u>1-Butanol</u>	1404	71-36-3	1416
			9.27	7511391	Toluene-D8	100	7690569	Toluene-D8	100	2037-26-5	100
			11.35	25144767	Cyclotrisiloxane, hexamethyl-	335	28519907	Cyclotrisiloxane, hexamethyl-	371	541-05-9	353
			17.44	10539817	Cyclotetrasiloxane, octamethyl-	140	10269999	Cyclotetrasiloxane, octamethyl-	134	556-67-2	137
			17.62	68694071	Decane	915	66702284	Decane	867	124-18-5	891
			18.07	57712828	<u>1-Hexanol, 2-ethyl-</u>	768	57209205	<u>1-Hexanol, 2-ethyl-</u>	744	104-76-7	756
			18.87	10143196	Decane, 2,2-dimethyl-	135	9947640	Decane, 2,2-dimethyl-	129	17302-37-3	132
			19.18	7782404	Dodecane, 2,7,10-trimethyl-	104	7816139	Decane, 2,6,6-trimethyl-	102	62108-24-1	103
			19.63	9332978	Undecane, 3,6-dimethyl-	124	10475861	Undecane, 3,5-dimethyl-	136	17312-81-1	130
			19.74	13918048	Octane, 2,6-dimethyl-	185	13586806	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	177	62108-31-0	181
			19.79	10933839	Hexane, 2,2,5-trimethyl-	146	10708331	Hexane, 2,2,5-trimethyl-	139	3522-94-9	142
			20.39	12465501	Dodecane, 4-methyl-	166	12350981	Nonane, 3-methyl-5-propyl-	161	31081-18-2	163
			20.71	11305907	Dodecane, 4,6-dimethyl-	151	10221443	Dodecane, 4,6-dimethyl-	133	61141-72-8	142
			21.08	10737126	Decane, 3,7-dimethyl-	143	10404580	Decane, 3,7-dimethyl-	135	17312-54-8	139
			21.54	10599204	Undecane, 2,6-dimethyl-	141	10395094	Undecane, 2,6-dimethyl-	135	17301-23-4	138
			22.72	8344063	Cyclopentasiloxane, decamethyl-	111	8318548	Cyclopentasiloxane, decamethyl-	108	541-02-6	110
			24.06	36260857	Dodecane	483	36366518	Dodecane	473	112-40-3	478
R-1-25	裏	40°C	6.29	122669643	<u>1-Butanol</u>	1466	119124525	<u>1-Butanol</u>	1461	71-36-3	1464
			9.27	8367916	Toluene-D8	100	8152035	Toluene-D8	100	2037-26-5	100
			11.35	30557792	Cyclotrisiloxane, hexamethyl-	365	32089387	Cyclotrisiloxane, hexamethyl-	394	541-05-9	379
			17.44	15405913	Cyclotetrasiloxane, octamethyl-	184	15005948	Cyclotetrasiloxane, octamethyl-	184	556-67-2	184
			17.62	79249190	Decane	947	77501888	Decane	951	124-18-5	949
			18.07	123339994	<u>1-Hexanol, 2-ethyl-</u>	1474	120618040	<u>1-Hexanol, 2-ethyl-</u>	1480	104-76-7	1477
			18.87	12486242	Decane, 2,2-dimethyl-	149	12342199	Decane, 2,2-dimethyl-	151	17302-37-3	150
			19.18	9650001	Dodecane, 2,7,10-trimethyl-	115	9802623	Dodecane, 2,7,10-trimethyl-	120	74645-98-0	118
			19.59	12997940	Undecane, 3,6-dimethyl-	155	12640797	Undecane, 3,6-dimethyl-	155	17301-28-9	155
			19.74	18009253	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	215	17178193	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	211	62108-31-0	213
			19.80	14384151		172	13125283		161		166
			20.38	16362468	Nonane, 3-methyl-5-propyl-	196	15618490	Nonane, 3-methyl-5-propyl-	192	31081-18-2	194
			20.72	15383578	Dodecane, 4,6-dimethyl-	184	14121057	Dodecane, 4,6-dimethyl-	173	61141-72-8	179
			21.08	14517887	Decane, 3,7-dimethyl-	173	13980841	Decane, 3,7-dimethyl-	172	17312-54-8	172
			21.54	15713935	Undecane, 2,6-dimethyl-	188	14911284	Undecane, 2,6-dimethyl-	183	17301-23-4	185
			22.72	17135580	Cyclopentasiloxane, decamethyl-	205	16225457	Cyclopentasiloxane, decamethyl-	199	541-02-6	202
			22.95	8563079	Ethanol, 1-(2-butoxyethoxy)-	102	30295356		372		237
24.06	67173228	Dodecane	803	63637544	Dodecane	781	112-40-3	792			
27.94	12729589	Cyclohexasiloxane, dodecamethyl-	152	12082391	Cyclohexasiloxane, dodecamethyl-	148	540-97-6	150			
29.75	8959866	Tetradecane	107	8324418	Tetradecane	102	629-59-4	105			
31.32	32143426	1-Dodecanol	384	31338470	1-Dodecanol	384	112-53-8	384			
32.36	8727635	Pentadecane	104	8608359	Pentadecane	106	629-62-9	105			
R-1-25	表	25°C	6.27	109376418	<u>1-Butanol</u>	1438	102056984	<u>1-Butanol</u>	1357	71-36-3	1397

Table 1

			9.27	7604809	Toluene-D8	100	7523296	Toluene-D8	100	2037-26-5	100			
			11.35	28520709	Cyclotrisiloxane, hexamethyl-	375	23858322	Cyclotrisiloxane, hexamethyl-	317	541-05-9	346			
			17.44	10767551	Cyclotetrasiloxane, octamethyl-	142	10457536	Cyclotetrasiloxane, octamethyl-	139	556-67-2	140			
			17.62	67595655	Decane	889	64920039	Decane	863	124-18-5	876			
			18.07	56234102	1-Hexanol, 2-ethyl-	739	55412745	1-Hexanol, 2-ethyl-	737	104-76-7	738			
			18.87	9662500	Decane, 2,2-dimethyl-	127	9545464	Decane, 2,2-dimethyl-	127	17302-37-3	127			
			19.63	9061254	Undecane, 3,5-dimethyl-	119	9680266	Undecane, 3,6-dimethyl-	129	17301-28-9	124			
			19.74	12890342	Octane, 2,6-dimethyl-	170	12420161	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	165	62108-31-0	167			
			19.83	10082713	Hexane, 2,2,5-trimethyl-	133	9754583	Hexane, 2,2,5-trimethyl-	130	3522-94-9	131			
			20.39	11308657	Nonane, 3-methyl-5-propyl-	149	11076010	Nonane, 3-methyl-5-propyl-	147	31081-18-2	148			
			20.72	10731409	Dodecane, 4,6-dimethyl-	141	10565707	Dodecane, 4,6-dimethyl-	140	61141-72-8	141			
			21.08	9361905	Decane, 3,7-dimethyl-	123	9318886	Decane, 3,7-dimethyl-	124	17312-54-8	123			
											0			
			21.52	9207695	Undecane, 2,6-dimethyl-	121	8922429	Undecane, 2,6-dimethyl-	119	17301-23-4	120			
							7615019	Cyclopentasiloxane, decamethyl-	101	541-02-6	51			
			24.06	32365571	Dodecane	426	31908669	Dodecane	424	112-40-3	425			
R-1-25	表	40°C	6.27	116448308	1-Butanol	1457	122876931	1-Butanol	1474	71-36-3	1466			
			9.26	7993220	Toluene-D8	100	8334468	Toluene-D8	100	2037-26-5	100			
			11.35	26088331	Cyclotrisiloxane, hexamethyl-	326	29241989	Cyclotrisiloxane, hexamethyl-	351	541-05-9	339			
			17.43	14697881	Cyclotetrasiloxane, octamethyl-	184	15341001	Cyclotetrasiloxane, octamethyl-	184	556-67-2	184			
			17.62	77560465	Decane	970	81060069	Decane	973	124-18-5	971			
			18.07	113827041	1-Hexanol, 2-ethyl-	1424	111073676	1-Hexanol, 2-ethyl-	1333	104-76-7	1378			
			18.86	12302018	Decane, 2,2-dimethyl-	154	12344082	Decane, 2,2-dimethyl-	148	17302-37-3	151			
			19.08	8079943	Octane, 6-ethyl-2-methyl-	101					51			
			19.18	9419633	Decane, 2,6,6-trimethyl-	118	9896626	Dodecane, 2,7,10-trimethyl-	119	74645-98-0	118			
			19.59	11647671	Undecane, 3,6-dimethyl-	146	12033940	Undecane, 3,6-dimethyl-	144	17301-28-9	145			
			19.74	16865542	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	211	17189440	Heptane, 4-ethyl-2,2,6,6-tetramethyl-	206	62108-31-0	209			
			19.79	11956786		150	12421192		149		149			
			20.38	14944331	Nonane, 3-methyl-5-propyl-	187	14617534	Dodecane, 4-methyl-	175	6117-97-1	181			
			20.74	13467855	Dodecane, 4,6-dimethyl-	168	12520493	Sulfurous acid, hexyl octyl ester	150	n/a	159			
			21.08	13100639	Decane, 3,7-dimethyl-	164	13260435	Decane, 3,7-dimethyl-	159	17312-54-8	162			
			21.52	13897070	Undecane, 2,6-dimethyl-	174	13800986	Undecane, 2,6-dimethyl-	166	17301-23-4	170			
			22.71	14489958	Cyclopentasiloxane, decamethyl-	181	14638879	Cyclopentasiloxane, decamethyl-	176	541-02-6	178			
							8491473	Ethanol, 1-(2-butoxyethoxy)-	102	54446-78-5	51			
						24.06	58236828	Dodecane	729	57468536	Dodecane	690	112-40-3	709
						27.94	9199500	Cyclohexasiloxane, dodecamethyl-	115	9073620	Cyclohexasiloxane, dodecamethyl-	109	540-97-6	112
			31.32	28859910	1-Dodecanol	361	31133284	1-Dodecanol	374	112-53-8	367			
R-1-26	裏	25°C	9.26	7247360	Toluene-D8	100	7170289	Toluene-D8	100	2037-26-5	100			
R-1-26	裏	40°C	9.26	6998705	Toluene-D8	100	7066815	Toluene-D8	100	2037-26-5	100			
R-1-26	表	25°C	9.26	7169804	Toluene-D8	100	7120877	Toluene-D8	100	2037-26-5	100			
R-1-26	表	40°C	9.27	6860502	Toluene-D8	100	6922653	Toluene-D8	100	2037-26-5	100			