

Attachment

Modified Regulation Order

PROPOSED MODIFICATIONS TO THE TABLES OF MAXIMUM INCREMENTAL REACTIVITY (MIR) VALUES

Note:

- 1) The original proposed amendments are shown in underline to indicate additions and ~~strikeout~~ to show deletions.
- 2) In general, the table with underlining for section 94700 includes the same compounds listed in the ~~strikeout~~ version, as well as several new compounds. The new table has been re-ordered to list compounds by chemical class. The 2001 MIR values for existing compounds were not changed. However, a few compounds listed in the old table were found to be listed erroneously.
- 3) The proposed 15-day modifications are shown in **bold double underline** to indicate additions and ~~double-strikeout~~ to indicate deletions.

Amend sections 94700 and 94701, title 17, California Code of Regulations, to read as follows:

§ 94700. MIR Values for Compounds.

#	<i>Organic Compound</i>	<i>MIR Value (July 18, 2001)</i>	<i>New MIR Value (Effective Date)</i>	<i><u>New MIR Value (Effective Date)</u></i>
	<u>Alkanes</u>			
1	<u>methane</u>	<u>0.01</u>	0.014	<u>0.014</u>
2	<u>ethane</u>	<u>0.31</u>	0.26	<u>0.28</u>
3	<u>propane</u>	<u>0.56</u>	0.46	<u>0.49</u>
4	<u>cyclopropane</u>	<u>0.10</u>	0.08	<u>0.09</u>
5	<u>n-butane</u>	<u>1.33</u>	1.08	<u>1.15</u>
6	<u>isobutane</u>	<u>1.35</u>	1.17	<u>1.23</u>
7	<u>cyclobutane</u>	<u>1.05</u>	1.12	<u>1.20</u>
8	<u>n-pentane</u>	<u>1.54</u>	1.23	<u>1.31</u>
9	<u>branched C5 alkane(s)</u>	<u>1.68</u>	1.36	<u>1.45</u>
10	<u>neopentane</u>	<u>0.69</u>	0.64	<u>0.67</u>
11	<u>isopentane</u>	<u>1.68</u>	1.36	<u>1.45</u>
12	<u>cyclopentane</u>	<u>2.69</u>	2.25	<u>2.39</u>
13	<u>n-hexane</u>	<u>1.45</u>	1.15	<u>1.24</u>
14	<u>branched C6 alkane(s)</u>	<u>1.53</u>	1.23	<u>1.31</u>
15	<u>2,2-dimethyl butane</u>	<u>1.33</u>	1.11	<u>1.17</u>
16	<u>2,3-dimethyl butane</u>	<u>1.14</u>	0.94	<u>0.97</u>
17	<u>2-methyl pentane</u>	<u>1.80</u>	1.41	<u>1.50</u>
18	<u>3-methyl pentane</u>	<u>2.07</u>	1.70	<u>1.80</u>
19	<u>C6 cycloalkane(s)</u>	<u>1.46</u>	1.16	<u>1.25</u>
20	<u>cyclohexane</u>	<u>1.46</u>	1.16	<u>1.25</u>
21	<u>isopropyl cyclopropane</u>	<u>1.52</u>	1.15	<u>1.22</u>

22	<u>methyl cyclopentane</u>	<u>2.42</u>	2.06	<u>2.19</u>
23	<u>unspeciated C6 alkane(s)</u>	<u>1.48</u>	1.27	<u>1.27</u>
24	<u>n-heptane</u>	<u>1.28</u>	0.99	<u>1.07</u>
25	<u>2,2,3-trimethyl butane</u>	<u>1.32</u>	1.06	<u>1.11</u>
26	<u>2,2-dimethyl pentane</u>	<u>1.22</u>	1.05	<u>1.12</u>
27	<u>2,3-dimethyl pentane</u>	<u>1.55</u>	1.26	<u>1.34</u>
28	<u>2,4-dimethyl pentane</u>	<u>1.65</u>	1.46	<u>1.55</u>
29	<u>2-methyl hexane</u>	<u>1.37</u>	1.10	<u>1.19</u>
30	<u>3,3-dimethyl pentane</u>	<u>1.32</u>	1.13	<u>1.20</u>
31	<u>3-methyl hexane</u>	<u>1.86</u>	1.54	<u>1.61</u>
32	<u>3-ethyl pentane*</u>	<u>1.79</u>	1.79	<u>1.90</u>
33	<u>branched C7 alkane(s)</u>	<u>1.63</u>	1.39	<u>1.48</u>
34	<u>1,1-dimethyl cyclopentane*</u>	<u>1.01</u>	1.01	<u>1.08</u>
35	<u>1,2-dimethyl cyclopentane*</u>	<u>1.87</u>	1.87	<u>1.99</u>
36	<u>C7 cycloalkane(s)</u>	<u>1.99</u>	1.58	<u>1.70</u>
37	<u>1,3-dimethyl cyclopentane</u>	<u>2.15</u>	1.82	<u>1.94</u>
38	<u>cycloheptane</u>	<u>2.26</u>	1.83	<u>1.96</u>
39	<u>ethyl cyclopentane</u>	<u>2.27</u>	1.89	<u>2.01</u>
40	<u>methyl cyclohexane</u>	<u>1.99</u>	1.58	<u>1.70</u>
41	<u>unspeciated C7 alkane(s)</u>	<u>1.79</u>	1.28	<u>1.41</u>
42	<u>n-octane</u>	<u>1.11</u>	0.82	<u>0.90</u>
43	<u>branched C8 alkane(s)</u>	<u>1.57</u>	1.35	<u>1.45</u>
44	<u>2,2,3,3-tetramethyl butane</u>	<u>0.44</u>	0.34	<u>0.33</u>
45	<u>2,2,4-trimethyl pentane</u>	<u>1.44</u>	1.29	<u>1.26</u>
46	<u>2,2-dimethyl hexane</u>	<u>1.13</u>	0.95	<u>1.02</u>
47	<u>2,3,4-trimethyl pentane</u>	<u>1.23</u>	0.96	<u>1.03</u>
48	<u>2,3-dimethyl hexane</u>	<u>1.34</u>	1.14	<u>1.19</u>
49	<u>2,4-dimethyl hexane</u>	<u>1.80</u>	1.62	<u>1.73</u>
50	<u>2,5-dimethyl hexane</u>	<u>1.68</u>	1.36	<u>1.46</u>
51	<u>2-methyl heptane</u>	<u>1.20</u>	0.99	<u>1.07</u>
52	<u>3-methyl heptane</u>	<u>1.35</u>	1.15	<u>1.24</u>
53	<u>4-methyl heptane</u>	<u>1.48</u>	1.16	<u>1.25</u>
54	<u>2,3,3-trimethyl pentane*</u>	<u>0.95</u>	0.95	<u>1.02</u>
55	<u>3,3-dimethyl hexane*</u>	<u>1.16</u>	1.16	<u>1.24</u>
56	<u>2,2,3-trimethyl pentane*</u>	<u>1.15</u>	1.15	<u>1.22</u>
57	<u>3,4-dimethyl hexane*</u>	<u>1.41</u>	1.44	<u>1.51</u>
58	<u>3-ethyl 2-methyl pentane*</u>	<u>1.25</u>	1.25	<u>1.33</u>
59	<u>C8 bicycloalkane(s)</u>	<u>1.75</u>	1.44	<u>1.51</u>
60	<u>1,1,2-trimethyl cyclopentane*</u>	<u>1.04</u>	1.04	<u>1.12</u>
61	<u>1,1,3-trimethyl cyclopentane*</u>	<u>0.94</u>	0.94	<u>1.01</u>
62	<u>1,1-dimethyl cyclohexane*</u>	<u>1.13</u>	1.13	<u>1.22</u>
63	<u>1,2,3-trimethyl cyclopentane*</u>	<u>1.52</u>	1.52	<u>1.63</u>
64	<u>1,2,4-trimethyl cyclopentane*</u>	<u>1.43</u>	1.43	<u>1.53</u>
65	<u>1-methyl-3-ethyl cyclopentane*</u>	<u>1.53</u>	1.53	<u>1.64</u>
66	<u>1,2-dimethyl cyclohexane*</u>	<u>1.30</u>	1.30	<u>1.41</u>
67	<u>1,4-dimethyl cyclohexane*</u>	<u>1.51</u>	1.54	<u>1.62</u>
68	<u>C8 cycloalkane(s)</u>	<u>1.75</u>	1.37	<u>1.47</u>
69	<u>1,3-dimethyl cyclohexane</u>	<u>1.72</u>	1.44	<u>1.52</u>
70	<u>cyclooctane</u>	<u>1.73</u>	1.35	<u>1.46</u>
71	<u>ethyl cyclohexane</u>	<u>1.75</u>	1.37	<u>1.47</u>
72	<u>propyl cyclopentane</u>	<u>1.91</u>	1.57	<u>1.69</u>

73	unspeciated C8 alkane(s)	<u>1.64</u>	1.49	<u>1.27</u>
74	n-nonane	<u>0.95</u>	0.74	<u>0.78</u>
75	branched C9 alkane(s)	<u>1.25</u>	1.05	<u>1.14</u>
76	2,2,5-trimethyl hexane	<u>1.33</u>	1.06	<u>1.13</u>
77	2,3,5-trimethyl hexane	<u>1.33</u>	1.14	<u>1.22</u>
78	2,4-dimethyl heptane	<u>1.48</u>	1.29	<u>1.38</u>
79	2-methyl octane	<u>0.96</u>	0.75	<u>0.83</u>
80	3,3-diethyl pentane	<u>1.35</u>	1.14	<u>1.21</u>
81	3,5-dimethyl heptane	<u>1.63</u>	1.45	<u>1.56</u>
82	4-ethyl heptane	<u>1.44</u>	1.13	<u>1.22</u>
83	4-methyl octane	<u>1.08</u>	0.87	<u>0.95</u>
84	2,4,4-trimethyl hexane*	<u>1.26</u>	1.26	<u>1.34</u>
85	3,3-dimethyl heptane*	<u>1.05</u>	1.05	<u>1.13</u>
86	4,4-dimethyl heptane*	<u>1.19</u>	1.19	<u>1.27</u>
87	2,2-dimethyl heptane*	<u>0.93</u>	0.93	<u>1.00</u>
88	2,2,4-trimethyl hexane*	<u>1.19</u>	1.19	<u>1.26</u>
89	2,6-dimethyl heptane*	<u>0.96</u>	0.96	<u>1.04</u>
90	2,3-dimethyl heptane*	<u>1.01</u>	1.01	<u>1.09</u>
91	2,5-dimethyl heptane*	<u>1.25</u>	1.25	<u>1.35</u>
92	3-methyl octane*	<u>0.91</u>	0.91	<u>0.99</u>
93	3,4-dimethyl heptane*	<u>1.15</u>	1.15	<u>1.24</u>
94	3-ethyl heptane*	<u>1.01</u>	1.01	<u>1.10</u>
95	cis-hydrindane; bicyclo[4.3.0]nonane*	<u>1.20</u>	1.20	<u>1.31</u>
96	C9 bicycloalkane(s)	<u>1.57</u>	1.28	<u>1.39</u>
97	1,2,3-trimethyl cyclohexane*	<u>1.12</u>	1.12	<u>1.22</u>
98	1,3,5-trimethyl cyclohexane*	<u>1.06</u>	1.06	<u>1.15</u>
99	1,1,3-trimethyl cyclohexane	<u>1.37</u>	1.11	<u>1.19</u>
100	1-ethyl-4-methyl cyclohexane	<u>1.62</u>	1.33	<u>1.44</u>
101	propyl cyclohexane	<u>1.47</u>	1.19	<u>1.29</u>
102	C9 cycloalkane(s)	<u>1.55</u>	1.26	<u>1.36</u>
103	unspeciated C9 alkane(s)	<u>2.13</u>	0.99	<u>1.09</u>
104	n-decane; n-C10	<u>0.83</u>	0.62	<u>0.68</u>
105	branched C10 alkane(s)	<u>1.09</u>	0.86	<u>0.94</u>
106	2,4,6-trimethyl heptane*	<u>1.20</u>	1.20	<u>1.28</u>
107	2,4-dimethyl octane	<u>1.09</u>	0.95	<u>1.03</u>
108	2,6-dimethyl octane	<u>1.27</u>	1.00	<u>1.08</u>
109	2-methyl nonane	<u>0.86</u>	0.65	<u>0.73</u>
110	3,4-diethyl hexane	<u>1.20</u>	0.83	<u>0.89</u>
111	3-methyl nonane	<u>0.89</u>	0.68	<u>0.75</u>
112	4-methyl nonane	<u>0.99</u>	0.78	<u>0.86</u>
113	4-propyl heptane	<u>1.24</u>	0.94	<u>1.02</u>
114	2,4,4-trimethyl heptane*	<u>1.23</u>	1.23	<u>1.31</u>
115	2,5,5-trimethyl heptane*	<u>1.17</u>	1.17	<u>1.25</u>
116	3,3-dimethyl octane*	<u>1.01</u>	1.01	<u>1.09</u>
117	4,4-dimethyl octane*	<u>1.06</u>	1.06	<u>1.14</u>
118	2,2-dimethyl octane*	<u>0.77</u>	0.77	<u>0.83</u>
119	2,2,4-trimethyl heptane*	<u>1.09</u>	1.09	<u>1.16</u>
120	2,2,5-trimethyl heptane*	<u>1.18</u>	1.18	<u>1.26</u>
121	2,3,6-trimethyl heptane*	<u>0.82</u>	0.82	<u>0.90</u>
122	2,3-dimethyl octane*	<u>0.79</u>	0.79	<u>0.86</u>
123	2,5-dimethyl octane*	<u>0.94</u>	0.94	<u>1.03</u>

124	2-methyl-3-ethyl heptane*	<u>0.91</u>	0.94	<u>0.99</u>
125	4-ethyl octane*	<u>0.71</u>	0.74	<u>0.79</u>
126	C10 bicycloalkane(s)	<u>1.29</u>	1.00	<u>1.09</u>
127	isobutyl cyclohexane; (2-methylpropyl) cyclohexane*	<u>0.90</u>	0.90	<u>0.99</u>
128	sec-butyl cyclohexane*	<u>0.90</u>	0.90	<u>0.99</u>
129	C10 cycloalkane(s)	<u>1.27</u>	0.99	<u>1.07</u>
130	1,3-diethyl cyclohexane	<u>1.34</u>	1.16	<u>1.26</u>
131	1,4-diethyl cyclohexane	<u>1.49</u>	1.14	<u>1.23</u>
132	1-methyl-3-isopropyl cyclohexane	<u>1.26</u>	0.92	<u>1.00</u>
133	butyl cyclohexane	<u>1.07</u>	0.90	<u>0.99</u>
134	unspeciated C10 alkane(s)	<u>1.16</u>	0.82	<u>0.90</u>
135	n-undecane; n-C11	<u>0.74</u>	0.55	<u>0.61</u>
136	branched C11 alkane(s)	<u>0.87</u>	0.66	<u>0.73</u>
137	2,3,4,6-tetramethyl heptane	<u>1.26</u>	1.03	<u>1.11</u>
138	2,6-dimethyl nonane	<u>0.95</u>	0.72	<u>0.79</u>
139	3,5-diethyl heptane	<u>1.21</u>	1.02	<u>1.11</u>
140	3-methyl decane	<u>0.77</u>	0.58	<u>0.65</u>
141	4-methyl decane	<u>0.80</u>	0.64	<u>0.68</u>
142	C11 bicycloalkane(s)	<u>1.01</u>	0.83	<u>0.91</u>
143	C11 cycloalkane(s)	<u>0.99</u>	0.82	<u>0.90</u>
144	1,3-diethyl-5-methyl cyclohexane	<u>1.11</u>	0.96	<u>1.04</u>
145	1-ethyl-2-propyl cyclohexane	<u>0.95</u>	0.73	<u>0.81</u>
146	pentyl cyclohexane	<u>0.91</u>	0.77	<u>0.84</u>
147	unspeciated C11 alkane(s)	<u>0.90</u>	0.67	<u>0.74</u>
148	n-dodecane; n-C12	<u>0.66</u>	0.50	<u>0.55</u>
149	branched C12 alkane(s)	<u>0.80</u>	0.56	<u>0.63</u>
150	2,3,5,7-tetramethyl octane	<u>1.06</u>	0.84	<u>0.91</u>
151	2,6-diethyl octane	<u>1.09</u>	0.89	<u>0.97</u>
152	3,6-dimethyl decane	<u>0.88</u>	0.62	<u>0.70</u>
153	3-methyl undecane	<u>0.70</u>	0.53	<u>0.59</u>
154	5-methyl undecane	<u>0.72</u>	0.49	<u>0.55</u>
155	C12 tricycloalkane(s)*	<u>0.74</u>	0.74	<u>0.82</u>
156	C12 bicycloalkane(s)	<u>0.88</u>	0.73	<u>0.81</u>
157	C12 cycloalkane(s)	<u>0.87</u>	0.72	<u>0.80</u>
158	1,3,5-triethyl cyclohexane	<u>1.06</u>	0.94	<u>1.02</u>
159	1-methyl-4-pentyl cyclohexane	<u>0.81</u>	0.65	<u>0.72</u>
160	hexyl cyclohexane	<u>0.75</u>	0.57	<u>0.65</u>
161	unspeciated C12 alkane(s)	<u>0.81</u>	0.64	<u>0.66</u>
162	n-tridecane; n-C13	<u>0.62</u>	0.47	<u>0.53</u>
163	branched C13 alkane(s)	<u>0.73</u>	0.54	<u>0.60</u>
164	2,3,6-trimethyl 4-isopropyl heptane	<u>1.24</u>	0.85	<u>0.93</u>
165	2,4,6,8-tetramethyl nonane	<u>0.94</u>	0.69	<u>0.76</u>
166	3,6-dimethyl undecane	<u>0.82</u>	0.62	<u>0.69</u>
167	3,7-diethyl nonane	<u>1.08</u>	0.84	<u>0.89</u>
168	3-methyl dodecane	<u>0.64</u>	0.49	<u>0.54</u>
169	5-methyl dodecane	<u>0.64</u>	0.44	<u>0.47</u>
170	C13 tricycloalkane(s)*	<u>0.64</u>	0.64	<u>0.71</u>
171	C13 bicycloalkane(s)	<u>0.79</u>	0.64	<u>0.70</u>
172	C13 cycloalkane(s)	<u>0.78</u>	0.63	<u>0.70</u>
173	1,3-diethyl-5-propyl cyclohexane	<u>0.96</u>	0.89	<u>0.96</u>

174	1-methyl-2-hexyl cyclohexane	0.70	0.52	0.58
175	heptyl cyclohexane	0.66	0.49	0.55
176	unspeciated C13 alkane(s)	0.73	0.56	0.61
177	n-tetradecane; n-C14	0.58	0.46	0.51
178	branched C14 alkane(s)	0.67	0.49	0.55
179	2,4,5,6,8-pentamethyl nonane	1.11	0.87	0.95
180	2-methyl 3,5-diisopropyl heptane	0.78	0.49	0.56
181	3,7-dimethyl dodecane	0.74	0.56	0.62
182	3,8-diethyl decane	0.68	0.53	0.60
183	3-methyl tridecane	0.57	0.45	0.51
184	6-methyl tridecane	0.62	0.40	0.46
185	C14 tricycloalkane(s)*	0.60	0.60	0.66
186	C14 bicycloalkane(s)	0.71	0.59	0.66
187	C14 cycloalkane(s)	0.71	0.59	0.65
188	1,3-dipropyl-5-ethyl cyclohexane	0.94	0.84	0.91
189	trans-1-methyl-4-heptyl cyclohexane	0.58	0.47	0.53
190	octyl cyclohexane	0.60	0.45	0.51
191	unspeciated C14 alkane(s)	0.67	0.52	0.57
192	n-pentadecane; n-C15	0.53	0.44	0.50
193	branched C15 alkane(s)	0.60	0.45	0.50
194	2,6,8-trimethyl 4-isopropyl nonane	0.76	0.57	0.63
195	3,7-dimethyl tridecane	0.64	0.50	0.55
196	3,9-diethyl undecane	0.62	0.46	0.51
197	3-methyl tetradecane	0.53	0.43	0.48
198	6-methyl tetradecane	0.57	0.37	0.42
199	C15 tricycloalkane(s)*	0.56	0.56	0.63
200	C15 bicycloalkane(s)	0.69	0.56	0.62
201	C15 cycloalkane(s)	0.68	0.55	0.61
202	1,3,5-tripropyl cyclohexane	0.90	0.84	0.87
203	1-methyl-2-octyl cyclohexane	0.60	0.45	0.50
204	nonyl cyclohexane	0.54	0.44	0.47
205	1,3-diethyl-5-pentyl cyclohexane	0.99	0.64	0.66
206	unspeciated C15 alkane(s)	0.61	0.49	0.54
207	n-hexadecane; n-C16	0.52	0.39	0.45
208	branched C16 alkane(s)	0.54	0.42	0.47
209	2,7-dimethyl 3,5-diisopropyl heptane	0.69	0.47	0.52
210	3-methyl pentadecane	0.50	0.44	0.46
211	4,8-dimethyl tetradecane	0.55	0.44	0.49
212	7-methyl pentadecane	0.51	0.40	0.45
213	C16 tricycloalkane(s)*	0.53	0.53	0.59
214	C16 bicycloalkane(s)*	0.52	0.52	0.58
215	C16 cycloalkane(s)	0.61	0.49	0.55
216	1,3-propyl-5-butyl cyclohexane	0.77	0.69	0.75
217	1-methyl-4-nonyl cyclohexane	0.55	0.44	0.46
218	decyl cyclohexane	0.50	0.38	0.43
219	unspeciated C16 alkane(s)	0.55	0.45	0.49
220	n-heptadecane; n-C17	0.49	0.37	0.42
221	branched C17 alkane(s)	0.51	0.40	0.44
222	C17 tricycloalkane(s)*	0.50	0.50	0.55
223	C17 bicycloalkane(s)*	0.49	0.49	0.55
224	C17 cycloalkane(s)*	0.46	0.46	0.52

225	unspeciated C17 alkane(s)	<u>0.52</u>	0.43	<u>0.46</u>
226	n-octodecane; n-C18	<u>0.44</u>	0.35	<u>0.40</u>
227	branched C18 alkane(s)	<u>0.48</u>	0.37	<u>0.42</u>
228	C18 tricycloalkane(s)*	<u>0.47</u>	0.47	<u>0.52</u>
229	C18 bicycloalkane(s)*	<u>0.46</u>	0.46	<u>0.52</u>
230	C18 cycloalkane(s)*	<u>0.44</u>	0.44	<u>0.49</u>
231	unspeciated C18 alkane(s)	<u>0.49</u>	0.40	<u>0.44</u>
232	n-nonadecane; n-C19	<u>0.44</u>	0.33	<u>0.38</u>
233	branched C19 alkane(s)*	<u>0.35</u>	0.35	<u>0.40</u>
234	C19 tricycloalkane(s)*	<u>0.44</u>	0.44	<u>0.49</u>
235	C19 bicycloalkane(s)*	<u>0.44</u>	0.44	<u>0.49</u>
236	C19 cycloalkane(s)*	<u>0.42</u>	0.42	<u>0.46</u>
237	n-eicosane; icosane; n-C20	<u>0.42</u>	0.34	<u>0.36</u>
238	branched C20 alkane(s)*	<u>0.34</u>	0.34	<u>0.38</u>
239	C20 tricycloalkane(s)*	<u>0.42</u>	0.42	<u>0.47</u>
240	C20 bicycloalkane(s)*	<u>0.42</u>	0.42	<u>0.46</u>
241	C20 cycloalkane(s)*	<u>0.39</u>	0.39	<u>0.44</u>
242	n-henicosane; n-C21	<u>0.40</u>	0.30	<u>0.34</u>
243	branched C21 alkane(s)*	<u>0.32</u>	0.32	<u>0.36</u>
244	C21 tricycloalkane(s)*	<u>0.40</u>	0.40	<u>0.44</u>
245	C21 bicycloalkane(s)*	<u>0.40</u>	0.40	<u>0.44</u>
246	C21 cycloalkane(s)*	<u>0.38</u>	0.38	<u>0.42</u>
247	n-docosane, n-C22	<u>0.38</u>	0.29	<u>0.33</u>
248	branched C22 alkane(s)*	<u>0.31</u>	0.34	<u>0.34</u>
249	C22 tricycloalkane(s)*	<u>0.38</u>	0.38	<u>0.42</u>
250	C22 bicycloalkane(s)*	<u>0.38</u>	0.38	<u>0.42</u>
251	C22 cycloalkane(s)*	<u>0.36</u>	0.36	<u>0.40</u>
	Alkenes			
252	ethene	<u>9.08</u>	8.76	<u>9.00</u>
253	propene	<u>11.58</u>	11.37	<u>11.66</u>
254	1,2-propadiene; allene*	<u>8.11</u>	8.11	<u>8.45</u>
255	1-butene	<u>10.29</u>	9.42	<u>9.73</u>
256	C4 terminal alkenes	<u>10.29</u>	9.42	<u>9.73</u>
257	isobutene	<u>6.35</u>	6.14	<u>6.29</u>
258	cis-2-butene	<u>13.22</u>	13.89	<u>14.24</u>
259	trans-2-butene	<u>13.91</u>	14.79	<u>15.16</u>
260	C4 internal alkenes	<u>13.57</u>	14.34	<u>14.70</u>
261	1,2-butadiene*	<u>9.03</u>	9.03	<u>9.35</u>
262	1,3-butadiene	<u>13.58</u>	12.21	<u>12.61</u>
263	C4 alkenes	<u>11.93</u>	11.88	<u>12.22</u>
264	1-pentene	<u>7.79</u>	6.97	<u>7.21</u>
265	3-methyl-1-butene	<u>6.99</u>	6.76	<u>6.99</u>
266	C5 terminal alkenes	<u>7.79</u>	6.97	<u>7.21</u>
267	2-methyl-1-butene	<u>6.51</u>	6.23	<u>6.40</u>
268	2-methyl-2-butene	<u>14.45</u>	13.72	<u>14.08</u>
269	cis-2-pentene	<u>10.24</u>	10.07	<u>10.38</u>
270	trans-2-pentene	<u>10.23</u>	10.25	<u>10.56</u>
271	2-pentenenes	<u>10.23</u>	10.16	<u>10.47</u>
272	C5 internal alkenes	<u>10.23</u>	10.16	<u>10.47</u>
273	cyclopentene	<u>7.38</u>	6.55	<u>6.77</u>
274	trans-1,3-pentadiene*	<u>12.10</u>	12.10	<u>12.50</u>

275	<u>cis-1,3-pentadiene*</u>	<u>12.10</u>	12.10	12.50
276	<u>1,4-pentadiene*</u>	<u>8.92</u>	8.92	9.24
277	<u>1,2-pentadiene*</u>	<u>7.59</u>	7.59	7.86
278	<u>3-methyl-1,2-butadiene*</u>	<u>9.95</u>	9.95	10.29
279	<u>isoprene; 2-methyl-1,3-butadiene</u>	<u>10.69</u>	10.28	10.61
280	<u>cyclopentadiene</u>	<u>7.61</u>	6.75	6.98
281	<u>C5 alkenes</u>	<u>9.01</u>	8.57	8.84
282	<u>1-hexene</u>	<u>6.17</u>	5.28	5.49
283	<u>3,3-dimethyl-1-butene</u>	<u>6.06</u>	5.64	5.82
284	<u>3-methyl-1-pentene</u>	<u>6.22</u>	5.93	6.14
285	<u>4-methyl-1-pentene</u>	<u>6.26</u>	5.48	5.68
286	<u>C6 terminal alkenes</u>	<u>6.17</u>	5.28	5.49
287	<u>2,3-dimethyl-1-butene</u>	<u>4.77</u>	4.64	4.75
288	<u>2-ethyl-1-butene</u>	<u>5.04</u>	4.93	5.07
289	<u>2-methyl-1-pentene</u>	<u>5.18</u>	5.42	5.26
290	<u>2,3-dimethyl-2-butene</u>	<u>13.32</u>	12.13	12.49
291	<u>2-methyl-2-pentene</u>	<u>12.28</u>	10.70	11.00
292	<u>cis 4-methyl-2-pentene*</u>	<u>7.88</u>	7.88	8.12
293	<u>cis-2-hexene</u>	<u>8.44</u>	8.06	8.31
294	<u>cis-3-hexene</u>	<u>8.22</u>	7.33	7.61
295	<u>cis-3-methyl-2-pentene</u>	<u>12.84</u>	12.15	12.49
296	<u>trans-3-methyl-2-pentene*</u>	<u>14.17</u>	12.84	13.17
297	<u>trans-4-methyl-2-pentene*</u>	<u>7.88</u>	7.88	8.12
298	<u>trans-2-hexene</u>	<u>8.44</u>	8.37	8.62
299	<u>trans-3-hexene</u>	<u>8.16</u>	7.30	7.57
300	<u>2-hexenes</u>	<u>8.44</u>	8.24	8.47
301	<u>C6 internal alkenes</u>	<u>8.44</u>	8.24	8.47
302	<u>3-methyl cyclopentene*</u>	<u>4.92</u>	4.92	5.10
303	<u>1-methyl cyclopentene</u>	<u>13.95</u>	12.11	12.49
304	<u>cyclohexene</u>	<u>5.45</u>	4.84	5.00
305	<u>trans,trans-2,4-hexadiene*</u>	<u>8.57</u>	8.57	8.83
306	<u>trans-1,3-hexadiene*</u>	<u>10.03</u>	10.03	10.37
307	<u>trans-1,4-hexadiene*</u>	<u>8.36</u>	8.36	8.64
308	<u>C6 cyclic olefins or di-olefins</u>	<u>8.65</u>	8.44	8.68
309	<u>C6 alkenes</u>	<u>6.88</u>	6.75	6.98
310	<u>trans-4-methyl-2-hexene</u>	<u>7.88</u>	6.96	7.18
311	<u>trans-3-methyl-2-hexene</u>	<u>14.17</u>	9.80	10.07
312	<u>2,3-dimethyl-2-hexene</u>	<u>10.41</u>	8.28	8.53
313	<u>1-heptene</u>	<u>4.20</u>	4.25	4.43
314	<u>3,4-dimethyl-1-pentene*</u>	<u>4.66</u>	4.66	4.84
315	<u>3-methyl-1-hexene*</u>	<u>4.24</u>	4.24	4.41
316	<u>2,4-dimethyl-1-pentene*</u>	<u>5.81</u>	5.84	6.01
317	<u>2,3-dimethyl-1-pentene*</u>	<u>4.97</u>	4.97	5.15
318	<u>3,3-dimethyl-1-pentene*</u>	<u>4.71</u>	4.74	4.91
319	<u>2-methyl-1-hexene*</u>	<u>4.92</u>	4.92	5.10
320	<u>2,3,3-trimethyl-1-butene</u>	<u>4.62</u>	4.33	4.49
321	<u>C7 terminal alkenes</u>	<u>4.20</u>	4.25	4.43
322	<u>4,4-dimethyl-cis-2-pentene*</u>	<u>6.45</u>	6.45	6.64
323	<u>2,4-dimethyl-2-pentene*</u>	<u>9.03</u>	9.03	9.29
324	<u>2-methyl-2-hexene*</u>	<u>9.22</u>	9.22	9.47
325	<u>3-ethyl-2-pentene*</u>	<u>9.49</u>	9.49	9.75

326	<u>3-methyl-trans-3-hexene*</u>	<u>9.44</u>	9.44	<u>9.72</u>
327	<u>cis-2-heptene*</u>	<u>6.94</u>	6.94	<u>7.16</u>
328	<u>2-methyl-trans-3-hexene*</u>	<u>6.03</u>	6.03	<u>6.25</u>
329	<u>3-methyl-cis-3-hexene*</u>	<u>9.44</u>	9.44	<u>9.72</u>
330	<u>3,4-dimethyl-cis-2-pentene*</u>	<u>8.91</u>	8.91	<u>9.15</u>
331	<u>2,3-dimethyl-2-pentene*</u>	<u>10.41</u>	9.45	<u>9.74</u>
332	<u>cis-3-heptene</u>	<u>6.96</u>	6.40	<u>6.33</u>
333	<u>trans-4,4-dimethyl-2-pentene</u>	<u>6.99</u>	6.45	<u>6.64</u>
334	<u>trans-2-heptene</u>	<u>7.33</u>	6.92	<u>7.14</u>
335	<u>trans-3-heptene</u>	<u>6.96</u>	6.09	<u>6.32</u>
336	<u>cis-3-methyl-2-hexene</u>	<u>13.38</u>	9.89	<u>10.07</u>
337	<u>2-heptenes</u>	<u>6.96</u>	6.09	<u>6.32</u>
338	<u>C7 internal alkenes</u>	<u>6.96</u>	6.09	<u>6.32</u>
339	<u>1-methyl cyclohexene</u>	<u>7.81</u>	6.44	<u>6.61</u>
340	<u>4-methyl cyclohexene</u>	<u>4.48</u>	4.02	<u>4.18</u>
341	<u>C7 cyclic olefins or di-olefins</u>	<u>7.49</u>	7.07	<u>7.29</u>
342	<u>C7 alkenes</u>	<u>5.76</u>	5.17	<u>5.37</u>
343	<u>1-octene</u>	<u>3.45</u>	3.12	<u>3.25</u>
344	<u>C8 terminal alkenes</u>	<u>3.45</u>	3.12	<u>3.25</u>
345	<u>2,4,4-trimethyl-1-pentene*</u>	<u>3.24</u>	3.24	<u>3.34</u>
346	<u>3-methyl-2-isopropyl-1-butene</u>	<u>3.29</u>	3.17	<u>3.31</u>
347	<u>trans-2-octene*</u>	<u>5.81</u>	5.81	<u>6.00</u>
348	<u>2-methyl-2-heptene*</u>	<u>8.10</u>	8.10	<u>8.33</u>
349	<u>cis-4-octene</u>	<u>5.94</u>	4.55	<u>4.73</u>
350	<u>trans-2,2-dimethyl 3-hexene</u>	<u>5.97</u>	4.84	<u>5.00</u>
351	<u>trans-2,5-dimethyl 3-hexene</u>	<u>5.44</u>	4.63	<u>4.82</u>
352	<u>trans-3-octene</u>	<u>6.13</u>	5.14	<u>5.34</u>
353	<u>trans-4-octene</u>	<u>5.90</u>	4.63	<u>4.81</u>
354	<u>3-octenes</u>	<u>6.13</u>	5.14	<u>5.34</u>
355	<u>C8 internal alkenes</u>	<u>5.90</u>	4.63	<u>4.81</u>
356	<u>2,4,4-trimethyl-2-pentene</u>	<u>8.52</u>	6.13	<u>6.29</u>
357	<u>1,2-dimethyl cyclohexene</u>	<u>6.77</u>	5.43	<u>5.63</u>
358	<u>C8 cyclic olefins or di-olefins</u>	<u>6.01</u>	4.71	<u>4.89</u>
359	<u>C8 alkenes</u>	<u>4.68</u>	3.88	<u>4.03</u>
360	<u>1-nonene</u>	<u>2.76</u>	2.48	<u>2.60</u>
361	<u>C9 terminal alkenes</u>	<u>2.76</u>	2.48	<u>2.60</u>
362	<u>4,4-dimethyl-1-pentene*</u>	<u>3.00</u>	3.00	<u>3.13</u>
363	<u>4-nonene*</u>	<u>4.37</u>	4.37	<u>4.54</u>
364	<u>3-nonenes</u>	<u>5.31</u>	4.37	<u>4.54</u>
365	<u>C9 internal alkenes</u>	<u>5.31</u>	4.37	<u>4.54</u>
366	<u>trans-4-nonene</u>	<u>5.23</u>	4.37	<u>4.54</u>
367	<u>C9 cyclic olefins or di-olefins</u>	<u>5.40</u>	4.44	<u>4.62</u>
368	<u>C9 alkenes</u>	<u>4.03</u>	3.43	<u>3.57</u>
369	<u>1-decene</u>	<u>2.28</u>	2.07	<u>2.17</u>
370	<u>C10 terminal alkenes</u>	<u>2.28</u>	2.07	<u>2.17</u>
371	<u>3,4-diethyl-2-hexene</u>	<u>3.95</u>	3.25	<u>3.38</u>
372	<u>cis-5-decene</u>	<u>4.89</u>	3.52	<u>3.66</u>
373	<u>trans-4-decene</u>	<u>4.50</u>	3.72	<u>3.87</u>
374	<u>C10 3-alkenes</u>	<u>4.50</u>	3.72	<u>3.87</u>
375	<u>C10 internal alkenes</u>	<u>4.50</u>	3.72	<u>3.87</u>
376	<u>C10 cyclic olefins or di-olefins</u>	<u>4.56</u>	3.78	<u>3.93</u>

377	<u>3-carene</u>	<u>3.21</u>	3.13	<u>3.24</u>
378	<u>α-pinene</u>	<u>4.29</u>	4.38	<u>4.51</u>
379	<u>β-pinene</u>	<u>3.28</u>	3.38	<u>3.52</u>
380	<u>α-limonene</u>	<u>3.99</u>	<u>4.40</u>	<u>4.55</u>
381	<u>sabinene</u>	<u>3.67</u>	<u>4.04</u>	<u>4.19</u>
382	<u>terpinolene*</u>	<u>6.16</u>	6.16	<u>6.36</u>
383	<u>camphene*</u>	<u>4.38</u>	4.38	<u>4.51</u>
384	<u>terpene (monoterpenes)</u>	<u>3.79</u>	3.94	<u>4.04</u>
385	<u>C10 alkenes</u>	<u>3.39</u>	3.17	<u>3.31</u>
386	<u>1-undecene</u>	<u>1.95</u>	<u>1.78</u>	<u>1.87</u>
387	<u>C11 terminal alkenes</u>	<u>1.95</u>	<u>1.78</u>	<u>1.87</u>
388	<u>trans-5-undecene</u>	<u>4.23</u>	3.46	<u>3.60</u>
389	<u>C11 3-alkenes</u>	<u>4.23</u>	3.46	<u>3.60</u>
390	<u>C11 internal alkenes</u>	<u>4.23</u>	3.46	<u>3.60</u>
391	<u>C11 cyclic olefins or di-olefins</u>	<u>4.29</u>	3.50	<u>3.65</u>
392	<u>C11 alkenes</u>	<u>3.09</u>	2.62	<u>2.73</u>
393	<u>C12 terminal alkenes</u>	<u>1.72</u>	1.56	<u>1.64</u>
394	<u>1-dodecene</u>	<u>1.72</u>	1.56	<u>1.64</u>
395	<u>C12 2-alkenes</u>	<u>3.75</u>	3.02	<u>3.14</u>
396	<u>C12 3-alkenes</u>	<u>3.75</u>	3.02	<u>3.14</u>
397	<u>C12 internal alkenes</u>	<u>3.75</u>	3.02	<u>3.14</u>
398	<u>trans-5-dodecene</u>	<u>3.74</u>	3.02	<u>3.14</u>
399	<u>C12 cyclic olefins or di-olefins</u>	<u>3.79</u>	3.05	<u>3.18</u>
400	<u>C12 alkenes</u>	<u>2.73</u>	2.29	<u>2.39</u>
401	<u>1-tridecene</u>	<u>1.55</u>	<u>1.44</u>	<u>1.48</u>
402	<u>C13 terminal alkenes</u>	<u>1.55</u>	<u>1.44</u>	<u>1.48</u>
403	<u>trans-5-tridecene</u>	<u>3.38</u>	2.49	<u>2.59</u>
404	<u>C13 3-alkenes</u>	<u>3.38</u>	2.49	<u>2.59</u>
405	<u>C13 internal alkenes</u>	<u>3.38</u>	2.49	<u>2.59</u>
406	<u>C13 cyclic olefins or di-olefins</u>	<u>3.42</u>	2.54	<u>2.62</u>
407	<u>C13 alkenes</u>	<u>2.46</u>	<u>1.95</u>	<u>2.03</u>
408	<u>1-tetradecene</u>	<u>1.41</u>	<u>1.27</u>	<u>1.34</u>
409	<u>C14 terminal alkenes</u>	<u>1.41</u>	<u>1.27</u>	<u>1.34</u>
410	<u>trans-5-tetradecene</u>	<u>3.08</u>	2.26	<u>2.35</u>
411	<u>C14 3-alkenes</u>	<u>3.08</u>	2.26	<u>2.35</u>
412	<u>C14 internal alkenes</u>	<u>3.08</u>	2.26	<u>2.35</u>
413	<u>C14 cyclic olefins or di-olefins</u>	<u>3.11</u>	2.29	<u>2.38</u>
414	<u>C14 alkenes</u>	<u>2.28</u>	<u>1.77</u>	<u>1.85</u>
415	<u>1-pentadecene</u>	<u>1.27</u>	<u>1.19</u>	<u>1.25</u>
416	<u>C15 terminal alkenes</u>	<u>1.27</u>	<u>1.19</u>	<u>1.25</u>
417	<u>trans-5-pentadecene</u>	<u>2.82</u>	2.08	<u>2.16</u>
418	<u>C15 3-alkenes</u>	<u>2.82</u>	2.08	<u>2.16</u>
419	<u>C15 internal alkenes</u>	<u>2.82</u>	2.08	<u>2.16</u>
420	<u>C15 cyclic olefins or di-olefins</u>	<u>2.85</u>	2.10	<u>2.19</u>
421	<u>C15 alkenes</u>	<u>2.06</u>	<u>1.63</u>	<u>1.71</u>
	<u>Aromatic Hydrocarbons</u>			
422	<u>benzene</u>	<u>0.81</u>	0.69	<u>0.72</u>
423	<u>toluene</u>	<u>3.97</u>	3.88	<u>4.00</u>
424	<u>ethyl benzene</u>	<u>2.79</u>	2.93	<u>3.04</u>
425	<u>m-xylene</u>	<u>10.61</u>	9.52	<u>9.75</u>

426	<u><i>o</i>-xylene</u>	<u>7.49</u>	7.44	<u>7.64</u>
427	<u><i>p</i>-xylene</u>	<u>4.25</u>	5.69	<u>5.84</u>
428	<u>C8 disubstituted benzenes</u>	<u>7.48</u>	7.57	<u>7.76</u>
429	<u>isomers of ethylbenzene</u>	<u>5.16</u>	6.39	<u>6.57</u>
430	<u>styrene</u>	<u>1.95</u>	1.65	<u>1.73</u>
431	<u>unspeciated C8 aromatics*</u>	<u>7.42</u>	7.42	<u>7.64</u>
432	<u>C9 monosubstituted benzenes</u>	<u>2.20</u>	1.95	<u>2.03</u>
433	<u><i>n</i>-propyl benzene</u>	<u>2.20</u>	1.95	<u>2.03</u>
434	<u>isopropyl benzene; cumene</u>	<u>2.32</u>	2.43	<u>2.52</u>
435	<u>C9 disubstituted benzenes</u>	<u>6.61</u>	5.65	<u>5.81</u>
436	<u><i>m</i>-ethyl toluene</u>	<u>9.37</u>	7.24	<u>7.39</u>
437	<u><i>o</i>-ethyl toluene</u>	<u>6.61</u>	5.43	<u>5.59</u>
438	<u><i>p</i>-ethyl toluene</u>	<u>3.75</u>	4.32	<u>4.44</u>
439	<u>C9 trisubstituted benzenes</u>	<u>9.90</u>	10.58	<u>10.87</u>
440	<u>1,2,3-trimethyl benzene</u>	<u>11.26</u>	11.66	<u>11.97</u>
441	<u>1,2,4-trimethyl benzene</u>	<u>7.18</u>	8.64	<u>8.87</u>
442	<u>1,3,5-trimethyl benzene</u>	<u>11.22</u>	11.44	<u>11.76</u>
443	<u>isomers of propyl benzene</u>	<u>6.12</u>	6.06	<u>6.23</u>
444	<u>indene</u>	<u>3.21</u>	1.48	<u>1.55</u>
445	<u>indane</u>	<u>3.17</u>	3.20	<u>3.32</u>
446	<u>allylbenzene*</u>	<u>1.45</u>	1.45	<u>1.53</u>
447	<u>α-methyl styrene</u>	<u>1.72</u>	1.45	<u>1.53</u>
448	<u>C9 styrenes</u>	<u>1.72</u>	1.45	<u>1.53</u>
449	<u>β-methyl styrene*</u>	<u>0.95</u>	0.95	<u>1.01</u>
450	<u>unspeciated C9 aromatics*</u>	<u>7.92</u>	7.92	<u>7.99</u>
451	<u>C10 monosubstituted benzenes</u>	<u>1.97</u>	2.27	<u>2.36</u>
452	<u><i>n</i>-butyl benzene</u>	<u>1.97</u>	2.27	<u>2.36</u>
453	<u>sec-butyl benzene</u>	<u>1.97</u>	2.27	<u>2.36</u>
454	<u>tert-butyl benzene*</u>	<u>1.89</u>	1.89	<u>1.95</u>
455	<u><i>o</i>-cymene; 1-methyl-2-(1-methylethyl) benzene*</u>	<u>5.34</u>	5.34	<u>5.49</u>
456	<u>1-methyl-2-<i>n</i>-propyl benzene*</u>	<u>5.34</u>	5.34	<u>5.49</u>
457	<u><i>m</i>-cymene; 1-methyl-3-(1-methylethyl) benzene*</u>	<u>6.92</u>	6.92	<u>7.10</u>
458	<u>1-methyl-3-<i>n</i>-propyl benzene*</u>	<u>6.92</u>	6.92	<u>7.10</u>
459	<u>1-methyl-4-<i>n</i>-propyl benzene*</u>	<u>4.31</u>	4.34	<u>4.43</u>
460	<u>C10 disubstituted benzenes</u>	<u>5.92</u>	5.53	<u>5.68</u>
461	<u><i>m</i>-C10 disubstituted benzenes*</u>	<u>6.92</u>	6.92	<u>7.10</u>
462	<u><i>o</i>-C10 disubstituted benzenes*</u>	<u>5.34</u>	5.34	<u>5.49</u>
463	<u><i>p</i>-C10 disubstituted benzenes*</u>	<u>4.31</u>	4.34	<u>4.43</u>
464	<u><i>m</i>-diethyl benzene</u>	<u>8.39</u>	6.92	<u>7.10</u>
465	<u><i>o</i>-diethyl benzene</u>	<u>5.92</u>	5.34	<u>5.49</u>
466	<u>1-methyl-4-isopropyl benzene; <i>p</i>-cymene*</u>	<u>4.32</u>	4.32	<u>4.44</u>
467	<u><i>p</i>-diethyl benzene</u>	<u>3.36</u>	4.34	<u>4.43</u>
468	<u>1,2,3-C10 trisubstituted benzenes*</u>	<u>9.89</u>	9.89	<u>10.15</u>
469	<u>1,2,4-C10 trisubstituted benzenes*</u>	<u>7.35</u>	7.35	<u>7.55</u>
470	<u>1,3,5-C10 trisubstituted benzenes*</u>	<u>9.80</u>	9.80	<u>10.08</u>
471	<u>1,2,3,4-tetramethyl benzene*</u>	<u>9.01</u>	9.04	<u>9.26</u>
472	<u>1,2,4,5-tetramethyl benzene*</u>	<u>9.01</u>	9.04	<u>9.26</u>
473	<u>1,2-dimethyl-3-ethyl benzene*</u>	<u>9.89</u>	9.89	<u>10.15</u>
474	<u>1,2-dimethyl-4-ethyl benzene *</u>	<u>7.35</u>	7.35	<u>7.55</u>

475	<u>1,3-dimethyl-2-ethyl benzene *</u>	<u>9.89</u>	9.89	<u>10.15</u>
476	<u>1,3-dimethyl-4-ethyl benzene*</u>	<u>7.35</u>	7.35	<u>7.55</u>
477	<u>1,3-dimethyl-5-ethyl benzene*</u>	<u>9.80</u>	9.80	<u>10.08</u>
478	<u>1,4-dimethyl-2-ethyl benzene*</u>	<u>7.35</u>	7.35	<u>7.55</u>
479	<u>1,2,3,5-tetramethyl benzene</u>	<u>8.25</u>	9.04	<u>9.26</u>
480	<u>C10 trisubstituted benzenes</u>	<u>8.86</u>	9.04	<u>9.26</u>
481	<u>C10 tetrasubstituted benzenes</u>	<u>8.86</u>	9.04	<u>9.26</u>
482	<u>butylbenzenes</u>	<u>5.48</u>	5.60	<u>5.76</u>
483	<u>methyl indanes</u>	<u>2.83</u>	2.86	<u>2.97</u>
484	<u>tetralin; 1,2,3,4-tetrahydronaphthalene</u>	<u>2.83</u>	2.86	<u>2.97</u>
485	<u>naphthalene</u>	<u>3.26</u>	3.24	<u>3.34</u>
486	<u>C10 styrenes</u>	<u>1.53</u>	1.30	<u>1.37</u>
487	<u>unspeciated C10 aromatics</u>	<u>5.48</u>	7.03	<u>7.07</u>
488	<u>n-pentyl benzene*</u>	<u>2.04</u>	2.04	<u>2.12</u>
489	<u>C11 monosubstituted benzenes</u>	<u>1.78</u>	2.04	<u>2.12</u>
490	<u>m-C11 disubstituted benzenes*</u>	<u>5.98</u>	5.98	<u>6.15</u>
491	<u>o-C11 disubstituted benzenes*</u>	<u>4.60</u>	4.60	<u>4.73</u>
492	<u>p-C11 disubstituted benzenes*</u>	<u>3.77</u>	3.77	<u>3.88</u>
493	<u>1-butyl-2-methyl benzene*</u>	<u>4.60</u>	4.60	<u>4.73</u>
494	<u>1-ethyl-2-n-propyl benzene*</u>	<u>4.60</u>	4.60	<u>4.73</u>
495	<u>o-tert-butyl toluene;</u> <u>1-(1,1-dimethylethyl)-2-methyl benzene*</u>	<u>4.60</u>	4.60	<u>4.73</u>
496	<u>1-methyl-3-n-butyl benzene*</u>	<u>5.98</u>	5.98	<u>6.15</u>
497	<u>p-isobutyl toluene;</u> <u>1-methyl-4-(2-methylpropyl) benzene*</u>	<u>3.77</u>	3.77	<u>3.88</u>
498	<u>C11 disubstituted benzenes</u>	<u>5.35</u>	4.79	<u>4.92</u>
499	<u>1,2,3-C11 trisubstituted benzenes*</u>	<u>8.64</u>	8.64	<u>8.88</u>
500	<u>1,2,4-C11 trisubstituted benzenes*</u>	<u>6.44</u>	6.44	<u>6.62</u>
501	<u>1,3,5-C11 trisubstituted benzenes*</u>	<u>8.65</u>	8.65	<u>8.90</u>
502	<u>pentamethyl benzene*</u>	<u>7.91</u>	7.94	<u>8.13</u>
503	<u>1-methyl-3,5-diethyl benzene*</u>	<u>8.65</u>	8.65	<u>8.90</u>
504	<u>C11 trisubstituted benzenes</u>	<u>8.03</u>	7.94	<u>8.13</u>
505	<u>C11 tetrasubstituted benzenes</u>	<u>8.03</u>	7.94	<u>8.13</u>
506	<u>C11 pentasubstituted benzenes</u>	<u>8.03</u>	7.94	<u>8.13</u>
507	<u>pentyl benzenes</u>	<u>4.96</u>	4.75	<u>4.90</u>
508	<u>C11 tetralins or indanes</u>	<u>2.56</u>	2.58	<u>2.69</u>
509	<u>methyl naphthalenes</u>	<u>4.61</u>	2.96	<u>3.06</u>
510	<u>1-methyl naphthalene</u>	<u>4.61</u>	2.96	<u>3.06</u>
511	<u>2-methyl naphthalene</u>	<u>4.61</u>	2.96	<u>3.06</u>
512	<u>unspeciated C11 aromatics</u>	<u>4.96</u>	6.82	<u>6.95</u>
513	<u>C12 monosubstituted benzenes</u>	<u>1.63</u>	1.83	<u>1.90</u>
514	<u>m-C12 disubstituted benzenes*</u>	<u>5.35</u>	5.35	<u>5.49</u>
515	<u>o-C12 disubstituted benzenes*</u>	<u>4.11</u>	4.14	<u>4.23</u>
516	<u>p-C12 disubstituted benzenes*</u>	<u>3.38</u>	3.38	<u>3.49</u>
517	<u>1,3-di-n-propyl benzene*</u>	<u>4.11</u>	4.14	<u>4.23</u>
518	<u>1,4 di-isopropyl benzene*</u>	<u>3.38</u>	3.38	<u>3.49</u>
519	<u>3-isopropyl cumene; 1,3-di-isopropyl benzene*</u>	<u>5.35</u>	5.35	<u>5.49</u>
520	<u>C12 disubstituted benzenes</u>	<u>4.90</u>	4.28	<u>4.40</u>
521	<u>1,2,3-C12 trisubstituted benzenes*</u>	<u>7.74</u>	7.74	<u>7.95</u>
522	<u>1,2,4-C12 trisubstituted benzenes*</u>	<u>5.78</u>	5.78	<u>5.94</u>
523	<u>1,3,5-C12 trisubstituted benzenes*</u>	<u>7.79</u>	7.79	<u>8.02</u>

524	<u>1-(1,1-dimethylethyl)-3,5-dimethylbenzene*</u>	<u>7.79</u>	7.79	<u>8.02</u>
525	<u>C12 trisubstituted benzenes</u>	<u>7.33</u>	7.40	<u>7.30</u>
526	<u>C12 tetrasubstituted benzenes</u>	<u>7.33</u>	7.40	<u>7.30</u>
527	<u>C12 pentasubstituted benzenes</u>	<u>7.33</u>	7.40	<u>7.30</u>
528	<u>C12 hexasubstituted benzenes</u>	<u>7.33</u>	7.40	<u>7.30</u>
529	<u>hexyl benzenes</u>	<u>4.53</u>	4.26	<u>4.39</u>
530	<u>C12 tetralins or indanes</u>	<u>2.33</u>	2.36	<u>2.45</u>
531	<u>1-ethyl naphthalene*</u>	<u>2.69</u>	2.69	<u>2.78</u>
532	<u>C12 naphthalenes*</u>	<u>3.76</u>	3.76	<u>3.89</u>
533	<u>C12 monosubstituted naphthalene</u>	<u>4.20</u>	2.69	<u>2.78</u>
534	<u>C12 disubstituted naphthalenes</u>	<u>5.54</u>	4.84	<u>4.99</u>
535	<u>2,3-dimethyl naphthalene</u>	<u>5.54</u>	4.84	<u>4.99</u>
536	<u>dimethyl naphthalenes</u>	<u>5.54</u>	4.84	<u>4.99</u>
537	<u>unspeciated C12 aromatics</u>	<u>4.53</u>	6.02	<u>6.02</u>
538	<u>C13 monosubstituted benzenes</u>	<u>1.50</u>	1.67	<u>1.74</u>
539	<u>m-C13 disubstituted benzenes*</u>	<u>4.80</u>	4.80	<u>4.93</u>
540	<u>o-C13 disubstituted benzenes*</u>	<u>3.67</u>	3.67	<u>3.78</u>
541	<u>p-C13 disubstituted benzenes*</u>	<u>3.03</u>	3.03	<u>3.13</u>
542	<u>C13 disubstituted benzenes</u>	<u>4.50</u>	3.84	<u>3.95</u>
543	<u>1,2,3-C13 trisubstituted benzenes*</u>	<u>6.94</u>	6.94	<u>7.13</u>
544	<u>1,2,4-C13 trisubstituted benzenes*</u>	<u>5.20</u>	5.20	<u>5.35</u>
545	<u>1,3,5-C13 trisubstituted benzenes*</u>	<u>7.04</u>	7.04	<u>7.24</u>
546	<u>C13 trisubstituted benzenes</u>	<u>6.75</u>	6.39	<u>6.57</u>
547	<u>C13 tetralins or indanes*</u>	<u>2.17</u>	2.17	<u>2.25</u>
548	<u>C13 naphthalenes*</u>	<u>3.45</u>	3.45	<u>3.57</u>
549	<u>C13 monosubstituted naphthalene</u>	<u>3.86</u>	2.47	<u>2.55</u>
550	<u>C13 disubstituted naphthalenes</u>	<u>5.08</u>	4.44	<u>4.58</u>
551	<u>C13 trisubstituted naphthalenes</u>	<u>5.08</u>	4.44	<u>4.58</u>
552	<u>unspeciated C13 aromatics*</u>	<u>4.88</u>	4.88	<u>4.81</u>
553	<u>C14 monosubstituted benzenes*</u>	<u>1.53</u>	1.53	<u>1.60</u>
554	<u>m-C14 disubstituted benzenes*</u>	<u>4.32</u>	4.32	<u>4.45</u>
555	<u>o-C14 disubstituted benzenes*</u>	<u>3.30</u>	3.30	<u>3.40</u>
556	<u>p-C14 disubstituted benzenes*</u>	<u>2.75</u>	2.75	<u>2.84</u>
557	<u>C14 disubstituted benzenes*</u>	<u>3.46</u>	3.46	<u>3.56</u>
558	<u>1,2,3-C14 trisubstituted benzenes*</u>	<u>6.31</u>	6.31	<u>6.49</u>
559	<u>1,2,4-C14 trisubstituted benzenes*</u>	<u>4.75</u>	4.75	<u>4.89</u>
560	<u>1,3,5-C14 trisubstituted benzenes*</u>	<u>6.44</u>	6.44	<u>6.63</u>
561	<u>C14 trisubstituted benzenes*</u>	<u>5.84</u>	5.84	<u>6.00</u>
562	<u>C14 tetralins or indanes*</u>	<u>2.01</u>	2.01	<u>2.09</u>
563	<u>C14 naphthalenes*</u>	<u>3.19</u>	3.19	<u>3.30</u>
564	<u>unspeciated C14 aromatics*</u>	<u>3.93</u>	3.93	<u>3.80</u>
565	<u>C15 monosubstituted benzenes*</u>	<u>1.42</u>	1.42	<u>1.48</u>
566	<u>C15 disubstituted benzenes*</u>	<u>3.15</u>	3.15	<u>3.25</u>
567	<u>m-C15 disubstituted benzenes*</u>	<u>3.93</u>	3.93	<u>4.04</u>
568	<u>o-C15 disubstituted benzenes*</u>	<u>3.00</u>	3.00	<u>3.09</u>
569	<u>p-C15 disubstituted benzenes*</u>	<u>2.51</u>	2.51	<u>2.59</u>
570	<u>C15 trisubstituted benzenes*</u>	<u>5.35</u>	5.35	<u>5.50</u>
571	<u>1,2,3-C15 trisubstituted benzenes*</u>	<u>5.77</u>	5.77	<u>5.94</u>
572	<u>1,2,4-C15 trisubstituted benzenes*</u>	<u>4.35</u>	4.35	<u>4.47</u>
573	<u>1,3,5-C15 trisubstituted benzenes*</u>	<u>5.92</u>	5.92	<u>6.10</u>
574	<u>C15 tetralins or indanes*</u>	<u>1.87</u>	1.87	<u>1.94</u>

575	C15 naphthalenes*	<u>2.97</u>	2.97	3.06
576	unspeciated C15 aromatics*	<u>3.35</u>	3.35	3.20
577	C16 monosubstituted benzenes*	<u>1.32</u>	1.32	1.38
578	<i>m</i> -C16 disubstituted benzenes*	<u>3.60</u>	3.60	3.71
579	<i>o</i> -C16 disubstituted benzenes*	<u>2.74</u>	2.74	2.83
580	<i>p</i> -C16 disubstituted benzenes*	<u>2.30</u>	2.30	2.38
581	C16 disubstituted benzenes*	<u>2.88</u>	2.88	2.97
582	1,2,3-C16 trisubstituted benzenes*	<u>5.31</u>	5.31	5.46
583	1,2,4-C16 trisubstituted benzenes*	<u>4.01</u>	4.01	4.13
584	1,3,5-C16 trisubstituted benzenes*	<u>5.47</u>	5.47	5.63
585	C16 trisubstituted benzenes*	<u>4.93</u>	4.93	5.07
586	C16 tetralins or indanes*	<u>1.75</u>	1.75	1.82
587	C16 naphthalenes*	<u>2.77</u>	2.77	2.86
588	unspeciated C16 aromatics*	<u>2.96</u>	2.96	2.79
589	C17 monosubstituted benzenes*	<u>1.24</u>	1.24	1.30
590	C17 disubstituted benzenes*	<u>2.71</u>	2.71	2.79
591	C17 trisubstituted benzenes*	<u>4.63</u>	4.63	4.77
592	C17 tetralins or indanes*	<u>1.64</u>	1.64	1.70
593	C17 naphthalenes*	<u>2.60</u>	2.60	2.68
594	C18 monosubstituted benzenes*	<u>1.17</u>	1.17	1.23
595	C18 disubstituted benzenes*	<u>2.55</u>	2.55	2.63
596	C18 trisubstituted benzenes*	<u>4.37</u>	4.37	4.49
597	C18 tetralins or indanes*	<u>1.55</u>	1.55	1.61
598	C18 naphthalenes*	<u>2.45</u>	2.45	2.53
599	C19 monosubstituted benzenes*	<u>1.11</u>	1.11	1.16
600	C19 disubstituted benzenes*	<u>2.42</u>	2.42	2.49
601	C19 trisubstituted benzenes*	<u>4.13</u>	4.13	4.25
602	C19 tetralins or indanes*	<u>1.46</u>	1.46	1.52
603	C19 naphthalenes*	<u>2.31</u>	2.31	2.39
604	C20 monosubstituted benzenes*	<u>1.05</u>	1.05	1.10
605	C20 disubstituted benzenes*	<u>2.29</u>	2.29	2.36
606	C20 trisubstituted benzenes*	<u>3.92</u>	3.92	4.04
607	C20 tetralins or indanes*	<u>1.39</u>	1.39	1.44
608	C20 naphthalenes*	<u>2.19</u>	2.19	2.26
609	C21 monosubstituted benzenes*	<u>1.00</u>	1.00	1.05
610	C21 disubstituted benzenes*	<u>2.18</u>	2.18	2.25
611	C21 trisubstituted benzenes*	<u>3.73</u>	3.73	3.84
612	C21 tetralins or indanes*	<u>1.32</u>	1.32	1.37
613	C21 naphthalenes*	<u>2.08</u>	2.08	2.15
614	C22 monosubstituted benzenes*	<u>0.96</u>	0.96	1.00
615	C22 disubstituted benzenes*	<u>2.08</u>	2.08	2.14
616	C22 trisubstituted benzenes*	<u>3.56</u>	3.56	3.66
617	C22 tetralins or indanes*	<u>1.26</u>	1.26	1.31
618	C22 naphthalenes*	<u>1.98</u>	1.98	2.05
	Oxygenated Organics			
619	carbon monoxide	<u>0.06</u>	0.053	0.056
620	formaldehyde	<u>8.97</u>	9.24	9.46
621	methanol	<u>0.71</u>	0.65	0.67
622	formic acid	<u>0.08</u>	0.06	0.07
623	ethylene oxide	<u>0.04</u>	0.04	0.04

624	acetaldehyde	6.84	6.34	6.54
625	ethanol	1.69	1.45	1.53
626	dimethyl ether	0.93	0.76	0.81
627	glyoxal	14.22	12.13	12.50
628	methyl formate	0.06	0.05	0.06
629	acetic acid	0.50	0.66	0.68
630	glycolaldehyde*	4.96	4.96	5.10
631	ethylene glycol	3.36	3.01	3.13
632	glycolic acid	2.67	2.32	2.38
633	peroxyacetic acid	12.62	0.52	0.54
634	acrolein	7.60	7.24	7.45
635	trimethylene oxide	5.22	4.32	4.56
636	propylene oxide	0.32	0.28	0.29
637	propionaldehyde	7.89	6.83	7.08
638	acetone	0.43	0.35	0.36
639	isopropyl alcohol	0.71	0.59	0.61
640	n-propyl alcohol	2.74	2.38	2.50
641	acrylic acid	11.66	11.10	11.38
642	methyl glyoxal	16.21	16.02	16.56
643	1,3-dioxolane	5.47	4.73	4.96
644	ethyl formate	0.52	0.45	0.48
645	methyl acetate	0.07	0.07	0.07
646	propionic acid	0.79	1.17	1.22
647	hydroxy acetone	3.08	3.15	3.23
648	propylene glycol	2.75	2.48	2.58
649	dimethoxy methane	1.04	0.89	0.94
650	2-methoxy ethanol	2.98	2.83	2.93
651	dimethyl carbonate; DMC	0.06	0.06	0.06
652	dihydroxy acetone	4.02	3.89	3.99
653	glycerol	3.27	3.05	3.15
654	furan	16.54	8.86	9.15
655	crotonaldehyde	10.07	9.14	9.39
656	methacrolein	6.23	5.84	6.01
657	cyclobutanone	0.68	0.59	0.62
658	methylvinyl ketone	8.73	9.39	9.65
659	tetrahydrofuran	4.95	4.10	4.31
660	1,2-epoxy butane	1.02	0.86	0.91
661	2-methyl propanal	5.87	5.05	5.25
662	butanal	6.74	5.75	5.97
663	C4 aldehydes	6.74	5.75	5.97
664	methyl ethyl ketone	1.49	1.43	1.48
665	isobutyl alcohol	2.24	2.41	2.51
666	n-butyl alcohol	3.34	2.76	2.88
667	sec-butyl alcohol	1.60	1.39	1.36
668	tert-butyl alcohol	0.45	0.39	0.41
669	diethyl ether	4.01	3.64	3.76
670	gamma-butyrolactone	1.15	0.99	0.96
671	methacrylic acid	18.78	18.04	18.50
672	methyl acrylate	12.24	11.21	11.48
673	vinyl acetate	3.26	3.11	3.20
674	hydroxyl-methacrolein	6.61	6.04	6.24

675	biacetyl; diacetyl; butanedione	<u>20.73</u>	49.43	<u>20.09</u>
676	1,4-dioxane	<u>2.71</u>	2.48	<u>2.62</u>
677	ethyl acetate	<u>0.64</u>	0.59	<u>0.63</u>
678	methyl propionate	<u>0.71</u>	0.63	<u>0.66</u>
679	n-propyl formate	<u>0.93</u>	0.73	<u>0.78</u>
680	isopropyl formate	<u>0.42</u>	0.35	<u>0.37</u>
681	isobutyric acid	<u>1.22</u>	1.15	<u>1.20</u>
682	butanoic acid	<u>1.78</u>	1.75	<u>1.82</u>
683	methoxy-acetone	<u>2.14</u>	1.94	<u>2.03</u>
684	1,3-butanediol*	<u>3.21</u>	3.24	<u>3.36</u>
685	1,2-butanediol	<u>2.21</u>	2.43	<u>2.52</u>
686	1,4-butanediol	<u>3.22</u>	2.64	<u>2.72</u>
687	2,3-butanediol*	<u>4.23</u>	4.23	<u>4.38</u>
688	1-methoxy-2-propanol	<u>2.62</u>	2.33	<u>2.44</u>
689	2-ethoxy-ethanol	<u>3.78</u>	3.57	<u>3.71</u>
690	2-methoxy-1-propanol	<u>3.01</u>	2.92	<u>3.01</u>
691	3-methoxy-1-propanol	<u>4.01</u>	3.74	<u>3.84</u>
692	propylene carbonate	<u>0.25</u>	0.27	<u>0.28</u>
693	methyl lactate	<u>2.75</u>	2.59	<u>2.67</u>
694	diethylene glycol	<u>3.55</u>	3.23	<u>3.35</u>
695	malic acid	<u>7.51</u>	6.77	<u>6.94</u>
696	2-methyl furan*	<u>8.02</u>	8.02	<u>8.30</u>
697	3-methyl furan*	<u>6.64</u>	6.64	<u>6.90</u>
698	cyclopentanone	<u>1.43</u>	1.08	<u>1.15</u>
699	C5 cyclic ketones	<u>1.43</u>	1.08	<u>1.15</u>
700	cyclopentanol	<u>1.96</u>	1.65	<u>1.72</u>
701	α -methyl tetrahydrofuran	<u>4.62</u>	3.78	<u>3.97</u>
702	tetrahydropyran	<u>3.81</u>	3.05	<u>3.22</u>
703	2-methyl-3-butene-2-ol	<u>5.12</u>	4.73	<u>4.91</u>
704	2,2-dimethylpropanal; pivaldehyde	<u>5.40</u>	4.74	<u>4.89</u>
705	3-methylbutanal; isovaleraldehyde	<u>5.52</u>	4.79	<u>4.97</u>
706	pentanal; valeraldehyde	<u>5.76</u>	4.89	<u>5.08</u>
707	C5 aldehydes	<u>5.76</u>	4.89	<u>5.08</u>
708	2-pentanone	<u>3.07</u>	2.70	<u>2.81</u>
709	3-pentanone	<u>1.45</u>	1.18	<u>1.24</u>
710	C5 ketones	<u>3.07</u>	2.70	<u>2.81</u>
711	methyl isopropyl ketone	<u>1.64</u>	1.58	<u>1.65</u>
712	2-pentanol	<u>1.74</u>	1.54	<u>1.61</u>
713	3-pentanol	<u>1.73</u>	1.56	<u>1.63</u>
714	pentyl alcohol	<u>3.35</u>	2.74	<u>2.83</u>
715	isoamyl alcohol; 3-methyl-1-butanol	<u>2.73</u>	3.04	<u>3.16</u>
716	2-methyl-1-butanol	<u>2.60</u>	2.30	<u>2.40</u>
717	ethyl isopropyl ether	<u>3.86</u>	3.61	<u>3.74</u>
718	methyl n-butyl ether	<u>3.66</u>	2.99	<u>3.15</u>
719	methyl tert -butyl ether; MTBE	<u>0.78</u>	0.70	<u>0.73</u>
720	ethyl acrylate	<u>8.78</u>	7.55	<u>7.77</u>
721	methyl methacrylate	<u>15.84</u>	15.22	<u>15.61</u>
722	glutaraldehyde	<u>4.79</u>	4.14	<u>4.31</u>
723	lumped C5+ unsaturated carbonyl species*	<u>6.18</u>	6.18	<u>6.38</u>
724	2,4-pentanedione	<u>1.02</u>	0.98	<u>1.01</u>
725	tetrahydro-2-furanmethanol;	<u>3.54</u>	3.19	<u>3.31</u>

	<u>tetrahydrofurfuryl alcohol</u>			
726	<u>ethyl propionate</u>	<u>0.79</u>	0.73	0.77
727	<u>isopropyl acetate</u>	<u>1.12</u>	1.03	1.07
728	<u>methyl butyrate</u>	<u>1.18</u>	1.04	1.09
729	<u>methyl isobutyrate</u>	<u>0.70</u>	0.58	0.61
730	<u>n-butyl formate</u>	<u>0.95</u>	0.77	0.83
731	<u>propyl acetate</u>	<u>0.87</u>	0.73	0.78
732	<u>3-methyl butanoic acid</u>	<u>4.26</u>	4.11	4.23
733	<u>2,2-dimethoxy-propane</u>	<u>0.52</u>	0.46	0.48
734	<u>1-ethoxy-2-propanol</u>	<u>3.25</u>	2.96	3.09
735	<u>2-propoxy-ethanol</u>	<u>3.52</u>	3.17	3.30
736	<u>3-ethoxy-1-propanol</u>	<u>4.24</u>	3.94	4.09
737	<u>3-methoxy-1-butanol</u>	<u>0.97</u>	0.75	0.87
738	<u>2-methoxyethyl acetate</u>	<u>1.18</u>	1.08	1.15
739	<u>ethyl lactate</u>	<u>2.71</u>	2.39	2.48
740	<u>methyl isopropyl carbonate</u>	<u>0.69</u>	0.59	0.62
741	<u>2-(2-methoxyethoxy) ethanol</u>	<u>2.90</u>	2.54	2.66
742	<u>pentaerythritol</u>	<u>2.42</u>	2.09	2.17
743	<u>phenol</u>	<u>1.82</u>	2.69	2.76
744	<u>2-ethyl furan*</u>	<u>6.85</u>	6.85	7.09
745	<u>2,5-dimethyl furan*</u>	<u>7.60</u>	7.60	7.88
746	<u>cyclohexanone</u>	<u>1.61</u>	1.26	1.35
747	<u>C6 cyclic ketones</u>	<u>1.61</u>	1.26	1.35
748	<u>mesityl oxide; 2-methyl-2-penten-4-one</u>	<u>17.37</u>	6.31	6.51
749	<u>cyclohexanol</u>	<u>2.25</u>	1.84	1.95
750	<u>hexanal</u>	<u>4.98</u>	4.18	4.35
751	<u>C6 aldehydes</u>	<u>4.98</u>	4.18	4.35
752	<u>4-methyl-2-pentanone</u>	<u>4.31</u>	3.74	3.88
753	<u>methyl n-butyl ketone</u>	<u>3.55</u>	3.00	3.14
754	<u>methyl tert-butyl ketone</u>	<u>0.78</u>	0.62	0.65
755	<u>C6 ketones</u>	<u>3.55</u>	3.00	3.14
756	<u>1-hexanol</u>	<u>2.74</u>	2.56	2.69
757	<u>2-hexanol</u>	<u>2.46</u>	1.97	2.08
758	<u>4-methyl-2-pentanol; methyl isobutyl carbinol</u>	<u>2.89</u>	2.52	2.64
759	<u>di-n-propyl ether</u>	<u>3.24</u>	2.93	3.08
760	<u>ethyl n-butyl ether</u>	<u>3.86</u>	3.33	3.48
761	<u>ethyl tert-butyl ether</u>	<u>2.11</u>	1.93	2.01
762	<u>methyl tert-amyl ether; TAME</u>	<u>2.14</u>	1.61	1.69
763	<u>diisopropyl ether</u>	<u>3.56</u>	3.39	3.52
764	<u>ethyl methacrylate*</u>	<u>12.15</u>	12.15	12.47
765	<u>ethyl butyrate</u>	<u>1.25</u>	1.11	1.17
766	<u>isobutyl acetate</u>	<u>0.67</u>	0.58	0.62
767	<u>methyl pivalate</u>	<u>0.39</u>	0.33	0.35
768	<u>n-butyl acetate</u>	<u>0.89</u>	0.78	0.83
769	<u>n-propyl propionate</u>	<u>0.93</u>	0.79	0.84
770	<u>sec-butyl acetate</u>	<u>1.43</u>	1.25	1.32
771	<u>tert-butyl acetate; tBAc</u>	<u>0.20</u>	0.17	0.18
772	<u>diacetone alcohol</u>	<u>0.68</u>	0.57	0.60
773	<u>methyl pentanoate; methyl valerate*</u>	<u>1.00</u>	1.00	1.05
774	<u>1,2-dihydroxyhexane</u>	<u>2.75</u>	2.45	2.55
775	<u>2-methyl-2,4-pentanediol</u>	<u>1.04</u>	1.39	1.45

776	ethylene glycol diethyl ether; 1,2-diethoxyethane	2.84	2.84	2.95
777	acetal (1,1-diethoxyethane)	3.68	3.43	3.58
778	1-propoxy-2-propanol; propylene glycol n-propyl ether	2.86	2.56	2.68
779	2-butoxy-ethanol	2.90	2.78	2.90
780	3 methoxy-3 methyl-butanol	1.74	1.46	2.88
781	n-propoxy-propanol	3.84	3.62	3.77
782	hydroxypropyl acrylate	5.56	4.74	4.90
783	1-methoxy-2-propyl acetate	1.71	1.62	1.70
784	2-ethoxyethyl acetate	1.90	1.75	1.84
785	2-methoxy-1-propyl acetate	1.12	1.06	1.12
786	methoxypropanol acetate	1.97	1.76	1.86
787	2-(2-ethoxyethoxy) ethanol	3.19	3.11	3.26
788	dipropylene glycol isomer (1-[2-hydroxypropyl]-2-propanol)	2.48	2.20	2.31
789	dimethyl succinate	0.23	0.24	0.23
790	ethylene glycol diacetate	0.72	0.62	0.66
791	adipic acid; hexanedioic acid	3.37	2.94	3.08
792	triethylene glycol	3.41	3.11	3.25
793	benzaldehyde	0.00	0.00	0.00
794	C7 alkyl phenols	2.34	2.34	2.40
795	<i>m</i> -cresol	2.34	2.34	2.40
796	<i>p</i> -cresol	2.34	2.34	2.40
797	<i>o</i> -cresol	2.34	2.34	2.40
798	benzyl alcohol*	4.98	4.98	5.11
799	methoxybenzene; anisole*	6.49	6.49	6.66
800	C7 cyclic ketones	1.41	1.40	1.18
801	heptanal	4.23	3.54	3.69
802	C7 aldehydes	4.23	3.54	3.69
803	2-methyl-hexanal	3.97	3.40	3.54
804	2-heptanone	2.80	2.24	2.36
805	2-methyl-3-hexanone	1.79	1.45	1.53
806	di-isopropyl ketone	1.63	1.23	1.31
807	C7 ketones	2.80	2.24	2.36
808	5-methyl-2-hexanone	2.10	2.28	2.41
809	3-methyl-2-hexanone	2.81	2.43	2.55
810	1-heptanol	2.21	1.75	1.84
811	dimethylpentanol; 2,3-dimethyl-1-pentanol	2.51	2.13	2.23
812	4,4-diethyl-3-oxahexane; tert-amyl ethyl ether; TAEE	2.03	1.86	1.95
813	n-butyl acrylate	5.52	4.87	5.02
814	isobutyl acrylate	5.05	4.57	4.72
815	butyl propionate	0.89	0.79	0.84
816	amyl acetate; n-pentyl acetate	0.96	0.78	0.84
817	n-propyl butyrate	1.17	0.99	1.05
818	isoamyl acetate; 3-methyl-butyl acetate	1.18	1.02	1.09
819	2-methyl-1-butyl acetate	1.17	1.04	1.08
820	methyl hexanoate*	0.96	0.96	1.02
821	1-tert-butoxy-2-propanol	1.71	1.53	1.61
822	2-tert-butoxy-1-propanol	1.81	1.75	1.81

823	n-butoxy-2-propanol; propylene glycol n-butyl ether	<u>2.70</u>	2.59	<u>2.72</u>
824	ethyl 3-ethoxy propionate	<u>3.61</u>	3.46	<u>3.58</u>
825	diisopropyl carbonate	<u>1.04</u>	0.94	<u>0.98</u>
826	2-(2-propoxyethoxy) ethanol	<u>3.00</u>	2.74	<u>2.85</u>
827	dipropylene glycol methyl ether; 1-methoxy-2-(2-hydroxypropoxy)-propane	<u>2.21</u>	1.87	<u>1.98</u>
828	dipropylene glycol methyl ether; 2-(2-methoxypropoxy)-1-propanol	<u>2.70</u>	2.46	<u>2.58</u>
829	1,2-propylene glycol diacetate	<u>0.94</u>	0.58	<u>0.61</u>
830	dimethyl glutarate	<u>0.51</u>	0.39	<u>0.42</u>
831	2-[2-(2-methoxyethoxy) ethoxy] ethanol	<u>2.62</u>	2.44	<u>2.58</u>
832	tolualdehyde	<u>0.00</u>	0.00	<u>0.00</u>
833	4-vinyl phenol*	<u>1.43</u>	1.43	<u>1.50</u>
834	2,4-dimethyl phenol*	<u>2.07</u>	2.07	<u>2.12</u>
835	2,5-dimethyl phenol*	<u>2.07</u>	2.07	<u>2.12</u>
836	3,4-dimethyl phenol*	<u>2.07</u>	2.07	<u>2.12</u>
837	2,3-dimethyl phenol*	<u>2.07</u>	2.07	<u>2.12</u>
838	2,6-dimethyl phenol*	<u>2.07</u>	2.07	<u>2.12</u>
839	C8 alkyl phenols	<u>2.07</u>	2.07	<u>2.12</u>
840	β -phenethyl alcohol; 2-phenyl ethyl alcohol*	<u>4.41</u>	4.44	<u>4.53</u>
841	C8 cyclic ketones	<u>1.25</u>	0.98	<u>1.05</u>
842	2-butyl tetrahydrofuran	<u>2.53</u>	2.00	<u>2.13</u>
843	octanal	<u>3.65</u>	3.03	<u>3.16</u>
844	C8 aldehydes	<u>3.65</u>	3.03	<u>3.16</u>
845	2-octanone	<u>1.66</u>	1.34	<u>1.40</u>
846	C8 ketones	<u>1.66</u>	1.34	<u>1.40</u>
847	1-octanol	<u>2.01</u>	1.35	<u>1.43</u>
848	2-ethyl-1-hexanol	<u>2.20</u>	1.90	<u>2.00</u>
849	2-octanol	<u>2.16</u>	1.86	<u>1.97</u>
850	3-octanol	<u>2.57</u>	2.46	<u>2.28</u>
851	4-octanol	<u>3.07</u>	2.40	<u>2.23</u>
852	5-methyl-1-heptanol	<u>1.95</u>	1.70	<u>1.79</u>
853	di-isobutyl ether	<u>1.29</u>	1.42	<u>1.20</u>
854	di-n-butyl ether	<u>3.17</u>	2.70	<u>2.84</u>
855	2-phenoxyethanol; ethylene glycol phenyl ether	<u>3.61</u>	4.35	<u>4.49</u>
856	butyl methacrylate	<u>9.09</u>	8.47	<u>8.70</u>
857	isobutyl methacrylate	<u>8.99</u>	8.39	<u>8.62</u>
858	hexyl acetates*	<u>0.74</u>	0.74	<u>0.80</u>
859	2,3-dimethylbutyl acetate	<u>0.84</u>	0.79	<u>0.75</u>
860	2-methylpentyl acetate	<u>1.11</u>	0.94	<u>0.98</u>
861	3-methylpentyl acetate	<u>1.31</u>	1.00	<u>1.07</u>
862	4-methylpentyl acetate	<u>0.92</u>	0.76	<u>0.82</u>
863	isobutyl isobutyrate	<u>0.61</u>	0.55	<u>0.60</u>
864	n-butyl butyrate	<u>1.12</u>	1.02	<u>1.08</u>
865	n-hexyl acetate	<u>0.87</u>	0.63	<u>0.69</u>
866	methyl amyl acetate; 4-methyl-2-pentanol acetate	<u>1.46</u>	1.28	<u>1.35</u>
867	n-pentyl propionate	<u>0.79</u>	0.66	<u>0.71</u>
868	2-ethyl hexanoic acid	<u>3.49</u>	3.19	<u>3.32</u>
869	methyl heptanoate*	<u>0.76</u>	0.76	<u>0.82</u>

870	<u>2-ethyl-1,3-hexanediol</u>	<u>2.62</u>	1.95	<u>2.05</u>
871	<u>2-n-hexyloxyethanol</u>	<u>2.45</u>	1.98	<u>2.09</u>
872	<u>2,2,4-trimethyl-1,3-pentanediol</u>	<u>1.74</u>	1.46	<u>1.54</u>
873	<u>phthalic anhydride*</u>	<u>2.50</u>	2.50	<u>2.58</u>
874	<u>methylparaben;</u> <u>4-hydroxybenzoic acid, methyl ester*</u>	<u>1.66</u>	1.66	<u>1.71</u>
875	<u>2-butoxyethyl acetate</u>	<u>1.67</u>	1.53	<u>1.62</u>
876	<u>2-methoxy-1-(2-methoxy-1-methylethoxy)-</u> <u>propane; dipropylene glycol dimethyl ether</u>	<u>2.09</u>	1.94	<u>2.02</u>
877	<u>2-(2-butoxyethoxy)-ethanol</u>	<u>2.87</u>	2.26	<u>2.39</u>
878	<u>dipropylene glycol ethyl ether</u>	<u>2.75</u>	2.60	<u>2.72</u>
879	<u>dimethyl adipate</u>	<u>1.95</u>	1.72	<u>1.80</u>
880	<u>2-(2-ethoxyethoxy) ethyl acetate</u>	<u>1.50</u>	1.39	<u>1.48</u>
881	<u>2-[2-(2-ethoxyethoxy) ethoxy] ethanol</u>	<u>2.66</u>	2.33	<u>2.46</u>
882	<u>tetraethylene glycol</u>	<u>2.84</u>	2.38	<u>2.51</u>
883	<u>cinnamic aldehyde*</u>	<u>4.68</u>	4.68	<u>4.84</u>
884	<u>cinnamic alcohol*</u>	<u>0.84</u>	0.84	<u>0.89</u>
885	<u>2,3,5-trimethyl phenol*</u>	<u>1.86</u>	1.86	<u>1.90</u>
886	<u>2,3,6-trimethyl phenol*</u>	<u>1.86</u>	1.86	<u>1.90</u>
887	<u>C9 alkyl phenols</u>	<u>1.86</u>	1.86	<u>1.90</u>
888	<u>isophorone; 3,5,5-trimethyl-2-cyclohexenone</u>	<u>10.58</u>	4.48	<u>4.63</u>
889	<u>C9 cyclic ketones</u>	<u>1.13</u>	0.88	<u>0.94</u>
890	<u>2-propyl cyclohexanone</u>	<u>1.71</u>	1.43	<u>1.54</u>
891	<u>4-propyl cyclohexanone</u>	<u>2.08</u>	1.74	<u>1.85</u>
892	<u>1-nonene-4-one</u>	<u>3.39</u>	3.03	<u>3.14</u>
893	<u>trimethyl cyclohexanol</u>	<u>2.17</u>	1.75	<u>1.86</u>
894	<u>2-nonanone</u>	<u>1.30</u>	1.00	<u>1.08</u>
895	<u>di-isobutyl ketone; 2,6-dimethyl-4-heptanone</u>	<u>2.94</u>	2.56	<u>2.68</u>
896	<u>C9 ketones</u>	<u>1.30</u>	1.00	<u>1.08</u>
897	<u>dimethyl heptanol; 2,6-dimethyl-2-heptanol</u>	<u>1.07</u>	0.88	<u>0.94</u>
898	<u>2,6-dimethyl-4-heptanol</u>	<u>2.37</u>	1.98	<u>2.09</u>
899	<u>1-phenoxy-2-propanol</u>	<u>1.73</u>	1.54	<u>1.60</u>
900	<u>2,4-dimethylpentyl acetate</u>	<u>0.98</u>	0.85	<u>0.92</u>
901	<u>2-methylhexyl acetate</u>	<u>0.89</u>	0.64	<u>0.69</u>
902	<u>3-ethylpentyl acetate</u>	<u>1.24</u>	1.03	<u>1.10</u>
903	<u>3-methylhexyl acetate</u>	<u>1.01</u>	0.83	<u>0.89</u>
904	<u>4-methylhexyl acetate</u>	<u>0.91</u>	0.76	<u>0.82</u>
905	<u>5-methylhexyl acetate</u>	<u>0.79</u>	0.54	<u>0.59</u>
906	<u>isoamyl isobutyrate</u>	<u>0.89</u>	0.76	<u>0.82</u>
907	<u>n-heptyl acetate</u>	<u>0.73</u>	0.59	<u>0.65</u>
908	<u>methyl octanoate*</u>	<u>0.64</u>	0.64	<u>0.69</u>
909	<u>1-(butoxyethoxy)-2-propanol</u>	<u>2.08</u>	1.82	<u>1.93</u>
910	<u>dipropylene glycol n-propyl ether isomer #1</u>	<u>2.13</u>	1.89	<u>2.00</u>
911	<u>dipropylene glycol methyl ether acetate</u> <u>isomer #1</u>	<u>1.41</u>	1.30	<u>1.38</u>
912	<u>dipropylene glycol methyl ether acetate</u> <u>isomer #2</u>	<u>1.58</u>	1.43	<u>1.52</u>
913	<u>dipropylene glycol methyl ether acetate</u> <u>isomers</u>	<u>1.49</u>	1.37	<u>1.45</u>
914	<u>2-[2-(2-propoxyethoxy) ethoxy] ethanol</u>	<u>2.46</u>	2.05	<u>2.17</u>
915	<u>tripropylene glycol*</u>	<u>2.07</u>	2.07	<u>2.18</u>
916	<u>2,5,8,11-tetraoxatridecan-13-ol</u>	<u>2.15</u>	1.86	<u>1.97</u>

917	glyceryl triacetate	0.57	0.54	0.55
918	anethol; <i>p</i> -propenyl-anisole*	0.76	0.76	0.80
919	C10 alkyl phenols	1.68	1.68	1.73
920	camphor*	0.45	0.45	0.49
921	α -terpineol	5.16	4.50	4.63
922	citronellol; 3,7-dimethyl-6-octen-1-ol*	5.63	5.63	5.79
923	hydroxycitronella*	2.50	2.50	2.61
924	C10 cyclic ketones	1.02	0.80	0.86
925	menthol	1.70	1.35	1.43
926	linalool*	5.28	5.28	5.43
927	2-decanone	1.06	0.82	0.90
928	C10 ketones	1.06	0.82	0.90
929	8-methyl-1-nonanol; isodecyl alcohol	1.23	0.99	1.06
930	1-decanol	1.22	1.00	1.06
931	3,7-dimethyl-1-octanol	1.42	1.13	1.20
932	di-n-pentyl ether	2.64	2.02	2.15
933	1,2-diacetyl benzene*	2.17	2.17	2.25
934	2,4-dimethylhexyl acetate	0.93	0.70	0.76
935	2-ethyl-hexyl acetate	0.79	0.60	0.66
936	3,4-dimethyl-hexyl acetate	1.16	0.84	0.87
937	3,5-dimethyl-hexyl acetate	1.09	0.92	0.99
938	3-ethyl-hexyl acetate	1.03	0.84	0.91
939	3-methyl-heptyl acetate	0.76	0.61	0.67
940	4,5-dimethyl-hexyl acetate	0.86	0.63	0.68
941	4-methyl-heptyl acetate	0.72	0.60	0.66
942	5-methyl-heptyl acetate	0.73	0.55	0.61
943	n-octyl acetate	0.64	0.52	0.57
944	geraniol*	4.97	4.07	5.12
945	methyl nonanoate*	0.54	0.54	0.59
946	2-(2-ethylhexyloxy) ethanol	1.71	1.45	1.55
947	propylparaben*; 4-hydroxybenzoic acid, propyl ester	1.40	1.40	1.44
948	2-(2-hexyloxyethoxy) ethanol	2.03	1.73	1.84
949	glycol ether DPnB; dipropylene glycol n-butyl ether; 1-(2-butoxy-1-methylethoxy)-2-propanol)	1.96	1.73	1.83
950	2-(2-butoxyethoxy) ethyl acetate	1.38	1.30	1.38
951	2-[2-(2-butoxyethoxy) ethoxy] ethanol	2.24	1.85	1.96
952	tripropylene glycol monomethyl ether	1.90	1.84	1.92
953	C11 alkyl phenols	1.54	1.54	1.58
954	2-ethyl-hexyl acrylate	2.42	2.43	2.52
955	2,3,5-trimethyl-hexyl acetate	0.86	0.79	0.85
956	2,3-dimethyl-heptyl acetate	0.84	0.65	0.71
957	2,4-dimethyl-heptyl acetate	0.88	0.62	0.68
958	2,5-dimethyl-heptyl acetate	0.86	0.72	0.78
959	2-methyloctyl acetate	0.63	0.47	0.52
960	3,5-dimethyl-heptyl acetate	1.01	0.74	0.81
961	3,6-dimethyl-heptyl acetate	0.87	0.71	0.78
962	3-ethyl-heptyl acetate	0.71	0.57	0.63
963	4,5-dimethyl-heptyl acetate	0.96	0.63	0.69
964	4,6-dimethyl-heptyl acetate	0.83	0.72	0.78
965	4-methyloctyl acetate	0.68	0.56	0.61

966	5-methyloctyl acetate	<u>0.67</u>	0.5	<u>0.56</u>
967	n-nonyl acetate	<u>0.58</u>	0.47	<u>0.52</u>
968	methyl decanoate*	<u>0.48</u>	0.48	<u>0.53</u>
969	C12 alkyl phenols	<u>1.42</u>	1.42	<u>1.46</u>
970	2,6,8-trimethyl-4-nonanone; isobutyl heptyl ketone	<u>1.86</u>	1.67	<u>1.66</u>
971	trimethylnonanolthreoerythro; 2,6,8-trimethyl-4-nonanol	<u>1.55</u>	1.24	<u>1.33</u>
972	3,6-dimethyl-octyl acetate	<u>0.88</u>	0.72	<u>0.79</u>
973	3-isopropyl-heptyl acetate	<u>0.71</u>	0.49	<u>0.54</u>
974	4,6-dimethyl-octyl acetate	<u>0.85</u>	0.70	<u>0.76</u>
975	methyl undecanoate*	<u>0.45</u>	0.45	<u>0.50</u>
976	1-hydroxy-2,2,4-trimethylpentyl-3-isobutyrate	<u>0.92</u>	0.84	<u>0.89</u>
977	3-hydroxy-2,2,4-trimethylpentyl-1-isobutyrate	<u>0.88</u>	0.72	<u>0.77</u>
978	2,2,4-trimethyl-1,3-pentanediol monoisobutyrate and isomers (texanol®)	<u>0.89</u>	0.76	<u>0.81</u>
979	substituted C7 ester (C12)	<u>0.92</u>	0.76	<u>0.81</u>
980	substituted C9 ester (C12)	<u>0.89</u>	0.76	<u>0.81</u>
981	diethylene glycol mono-(2-ethylhexyl) ether*	<u>1.46</u>	1.46	<u>1.56</u>
982	diethyl phthalate*	<u>1.56</u>	1.56	<u>1.62</u>
983	dimethyl sebacate	<u>0.48</u>	0.40	<u>0.43</u>
984	diisopropyl adipate	<u>1.42</u>	1.22	<u>1.28</u>
985	3,6,9,12-tetraoxa-hexadecan-1-ol	<u>1.90</u>	1.62	<u>1.72</u>
986	triethyl citrate*	<u>0.66</u>	0.66	<u>0.70</u>
987	3,5,7-trimethyl-octyl acetate	<u>0.83</u>	0.60	<u>0.66</u>
988	3-ethyl-6-methyl-octyl acetate	<u>0.80</u>	0.57	<u>0.63</u>
989	4,7-dimethyl-nonyl acetate	<u>0.64</u>	0.45	<u>0.50</u>
990	methyl dodecanoate; methyl laurate	<u>0.53</u>	0.42	<u>0.47</u>
991	tripropylene glycol n-butyl ether*	<u>1.55</u>	1.55	<u>1.64</u>
992	amyl cinnamal*	<u>3.06</u>	3.06	<u>3.16</u>
993	isobornyl methacrylate	<u>8.64</u>	5.37	<u>5.51</u>
994	2,3,5,7-tetramethyl-octyl acetate	<u>0.74</u>	0.57	<u>0.62</u>
995	3,5,7-trimethyl-nonyl acetate	<u>0.76</u>	0.56	<u>0.62</u>
996	3,6,8-trimethyl-nonyl acetate	<u>0.72</u>	0.53	<u>0.59</u>
997	methyl tridecanoate*	<u>0.40</u>	0.40	<u>0.45</u>
998	hexyl cinnamal*	<u>2.86</u>	2.86	<u>2.96</u>
999	2,6-di-tert-butyl- <i>p</i> -cresol*	<u>1.15</u>	1.15	<u>1.18</u>
1000	2-ethyl-hexyl benzoate*	<u>0.93</u>	0.93	<u>0.98</u>
1001	2,4,6,8-tetramethyl-nonyl acetate	<u>0.63</u>	0.46	<u>0.51</u>
1002	3-ethyl-6,7-dimethyl-nonyl acetate	<u>0.76</u>	0.55	<u>0.61</u>
1003	4,7,9-trimethyl-decyl acetate	<u>0.55</u>	0.37	<u>0.42</u>
1004	methyl myristate; methyl tetradecanoate	<u>0.47</u>	0.39	<u>0.43</u>
1005	methyl <i>cis</i> -9-pentadecenoate*	<u>1.63</u>	1.73	<u>1.80</u>
1006	methyl <i>cis</i> -9-hexadecenoate; methyl palmitoleate*	<u>1.63</u>	1.64	<u>1.70</u>
1007	methyl pentadecanoate*	<u>0.42</u>	0.42	<u>0.47</u>
1008	2,3,5,6,8-pentamethyl-nonyl acetate	<u>0.74</u>	0.59	<u>0.65</u>
1009	3,5,7,9-tetramethyl-decyl acetate	<u>0.58</u>	0.43	<u>0.48</u>
1010	5-ethyl-3,6,8-trimethyl-nonyl acetate	<u>0.77</u>	0.74	<u>0.77</u>
1011	dibutyl phthalate*	<u>1.20</u>	1.20	<u>1.25</u>
1012	2,2,4-trimethyl-1,3-pentanediol diisobutyrate*	<u>0.34</u>	0.34	<u>0.38</u>

1013	methyl hexadecanoate; methyl palmitate*	0.40	0.40	0.44
1014	methyl <i>cis</i> -9-heptadecenoate*	1.56	1.56	1.62
1015	methyl heptadecanoate; methyl margarate*	0.38	0.38	0.42
1016	methyl linolenate; methyl <i>cis,cis,cis</i> -9,12,15-octadecatrienoate*	1.77	2.23	2.32
1017	methyl linoleate; methyl <i>cis,cis</i> -9,12-octadecadienoate*	1.48	1.77	1.84
1018	methyl <i>cis</i> -9-octadecenoate; methyl oleate*	1.48	1.48	1.54
1019	methyl octadecanoate; methyl stearate*	0.36	0.36	0.40
	Other Organic Compounds			
1020	methylamine*	7.29	7.29	7.70
1021	methyl chloride	0.03	0.04	0.04
1022	methyl nitrite*	10.50	10.50	10.84
1023	nitromethane	7.86	0.07	0.07
1024	carbon disulfide*	0.23	0.23	0.25
1025	dichloromethane	0.07	0.04	0.04
1026	methyl bromide	0.02	0.02	0.02
1027	chloroform	0.03	0.02	0.02
1028	methyl iodide*	0.00	0.00	0.00
1029	carbon tetrachloride	0.00	0.00	0.00
1030	chloropicrin; trichloro-nitro-methane*	1.80	1.80	1.85
1031	methylene bromide	0.00	0.00	0.00
1032	acetylene	1.25	0.93	0.95
1033	dimethyl amine	9.37	2.95	3.17
1034	ethyl amine	7.80	5.48	5.78
1035	ethanolamine	5.97	6.53	6.81
1036	vinyl chloride	2.92	2.70	2.83
1037	ethyl chloride	0.25	0.27	0.29
1038	1,1-difluoroethane; HFC-152a	0.00	0.02	0.02
1039	methyl isothiocyanate*; MITC	0.31	0.31	0.32
1040	nitroethane	12.79	0.06	0.06
1041	dimethyl sulfoxide; DMSO	6.90	6.46	6.68
1042	chloroacetaldehyde*	12.00	12.00	12.30
1043	1,1-dichloroethene*	1.69	1.69	1.79
1044	<i>trans</i> -1,2-dichloroethene	0.81	1.65	1.70
1045	<i>cis</i> -1,2-dichloroethene*	1.65	1.65	1.70
1046	1,1-dichloroethane	0.10	0.07	0.07
1047	1,2-dichloroethane	0.10	0.24	0.21
1048	1,1,1,2-tetrafluoroethane; HFC-134a	0.00	0.00	0.00
1049	ethyl bromide	0.11	0.12	0.13
1050	trichloroethylene; TCE	0.60	0.64	0.64
1051	1,1,1-trichloroethane	0.00	0.04	0.01
1052	1,1,2-trichloroethane	0.06	0.08	0.09
1053	perchloroethylene; PERC	0.04	0.03	0.03
1054	1,2-dibromoethane	0.05	0.10	0.10
1055	methyl acetylene	6.45	6.57	6.72
1056	acrylonitrile*	2.16	2.16	2.24
1057	trimethyl amine	7.06	6.03	6.32
1058	isopropyl amine*	6.93	6.03	7.23
1059	<i>n</i> -methyl acetamide**	19.70	10.63	20.19
1060	1-amino-2-propanol	13.42	5.17	5.42

1061	3-chloropropene*	11.98	11.98	12.22
1062	1-nitropropane	16.16	0.20	0.22
1063	2-nitropropane	16.16	0.10	0.11
1064	chloroacetone*	9.22	9.22	9.41
1065	<i>trans</i> -1,3-dichloropropene*	4.92	4.92	5.03
1066	<i>cis</i> -1,3-dichloropropene*	3.61	3.61	3.70
1067	1,3-dichloropropene mixture*	4.19	4.19	4.29
1068	1,2-dichloropropene*	0.28	0.28	0.29
1069	<i>trans</i> -1,3,3,3-tetrafluoropropene*; <u>trans-HFO-1234ze</u>	0.09	0.09	0.10
1070	2,3,3,3-tetrafluoropropene*; <u>HFO-1234yf</u>	0.27	0.27	0.28
1071	n-propyl bromide	0.35	0.40	0.42
1072	1,1,1,3,3-pentafluoropropane*; <u>HFC-245fa</u>	0.00	0.00	0.00
1073	3,3-dichloro-1,1,1,2,2-pentafluoropropane; <u>HCFC-225ca*</u>	0.00	0.00	0.00
1074	1,3-dichloro-1,1,2,2,3-pentafluoropropane; <u>HCFC-225cb*</u>	0.00	0.00	0.00
1075	1,3-butadiyne*	5.53	5.53	5.76
1076	1-buten-3-yne; vinyl acetylene*	10.15	10.15	10.48
1077	2-butyne	16.33	15.95	16.32
1078	ethyl acetylene	6.20	5.95	6.11
1079	tert-butyl amine*	0.00	0.00	0.00
1080	morpholine	15.43	1.85	1.98
1081	ethyl methyl ketone oxime; methyl ethyl ketoxime*	22.04	1.52	1.58
1082	dimethylaminoethanol; <u>DMAE</u>	4.76	5.41	5.62
1083	2-amino-1-butanol*	4.78	4.78	4.98
1084	2-amino-2-methyl-1-propanol; <u>AMP</u>	15.08	0.00	0.25
1085	1-chlorobutane*	1.04	1.04	1.10
1086	diethylenetriamine**	13.03	15.10	15.53
1087	diethanol-amine	4.05	2.36	2.47
1088	2-(chloro-methyl)-3-chloro-propene	1.13	6.85	7.00
1089	n-butyl bromide	0.60	0.78	0.82
1090	1,1,1,3,3-pentafluorobutane; HFC-365mfc*	0.00	0.00	0.00
1091	n-methyl-2-pyrrolidone	2.56	2.28	2.41
1092	2-amino-2-ethyl-1,3-propanediol*	0.00	0.00	0.78
1093	hydroxyethylethylene urea**	14.75	10.94	11.22
1094	methyl-nonafluoro-butyl ether*; <u>HFE-7100 isomer</u>	0.05	0.05	0.06
1095	methyl-nonafluoro-isobutyl ether*; <u>HFE-7100 isomer</u>	0.05	0.05	0.06
1096	methoxy-perfluoro-n-butane*	0.00	0.00	0.00
1097	methoxy-perfluoro-isobutene*	0.00	0.00	0.00
1098	1,1,1,2,2,3,4,5,5,5-decafluoropentane; <u>HFC-43-10mee*</u>	0.00	0.00	0.00
1099	triethyl amine	16.60	3.66	3.84
1100	triethylene diamine*	3.31	3.31	3.46
1101	monochlorobenzene	0.36	0.31	0.32
1102	nitrobenzene	0.07	0.05	0.06
1103	<i>p</i> -dichlorobenzene	0.20	0.17	0.18
1104	<i>o</i> -dichlorobenzene*	0.17	0.17	0.18
1105	triethanolamine*	2.76	4.08	4.21

1106	hexamethyl-disiloxane*	0.00	0.00	0.00
1107	hydroxymethyl-disiloxane*	0.00	0.00	0.00
1108	hexafluoro-benzene*	0.05	0.05	0.05
1109	ethoxy-perfluoro-n-butane*	0.01	0.01	0.01
1110	ethoxy-perfluoro-isobutane*	0.01	0.01	0.01
1111	ethyl nonafluorobutyl ether*; HFE-7200 isomer	0.19	0.19	0.21
1112	ethyl nonafluoroisobutyl ether*; HFE-7200 isomer	0.19	0.19	0.21
1113	perfluoro-n-hexane*	0.00	0.00	0.00
1114	2-chlorotoluene*	2.82	2.82	2.92
1115	<i>m</i> -nitrotoluene*	0.48	0.48	0.50
1116	benzotrifluoride	0.26	0.28	0.29
1117	<i>p</i> -trifluoromethyl-chloro-benzene	0.11	0.12	0.13
1118	<i>p</i> -toluene isocyanate	0.93	1.03	1.06
1119	3-(chloromethyl)-heptane*	0.88	0.88	0.95
1120	cyclosiloxane D4; octamethylcyclotetrasiloxane*	0.00	0.00	0.00
1121	cumene hydroperoxide; 1-methyl-1- phenylethylhydroperoxide**	12.61	8.83	9.08
1122	2,4-toluene diisocyanate*	0.00	0.00	0.00
1123	2,6-toluene diisocyanate*	0.00	0.00	0.00
1124	toluene diisocyanate (mixed isomers)*	0.00	0.00	0.00
1125	molinate; S-ethyl hexahydro-1 <i>H</i> -azepine-1-carbothioate*	1.43	1.43	1.51
1126	EPTC; S-ethyl dipropyl-thiocarbamate*	1.58	1.58	1.67
1127	triisopropanolamine*	2.60	2.60	2.70
1128	dexpanthenol; pantothenol**	9.35	5.98	6.15
1129	pebulate; S-propyl butylethylthiocarbamate*	1.58	1.58	1.67
1130	cyclosiloxane D5; decamethylcyclopentasiloxane*	0.00	0.00	0.00
1131	thiobencarb; S-[4-chlorobenzyl] N,N-diethylthiolcarbamate*	0.65	0.65	0.68
1132	methylene diphenylene diisocyanate	0.79	0.87	0.89
1133	lauryl pyrrolidone*	0.89	0.89	0.94
	Complex Mixtures			
1134	base ROG mixture	3.71	3.50	3.60
1135	final LEV – RFA*	3.44	3.44	
1136	TLEV exhaust – RFA*	3.89	3.89	
1137	TLEV exhaust – phase 2*	3.85	3.85	
1138	final LEV – phase 2*	3.34	3.34	
1139	TLEV exhaust – LPG*	1.99	1.99	
1140	TLEV exhaust – CNG*	0.70	0.70	
1141	TLEV exhaust – E-85*	2.46	2.46	
1142	TLEV exhaust – M-85*	1.53	1.53	
1143	composite mineral spirit (naphthas or lactol spirits) (ARB Profile ID 802)*	1.75	1.75	
1144	Safety-Kleen mineral spirits "A" (Type I-B, 91% alkanes)*	1.11	1.11	
1145	Safety-Kleen mineral spirits "B" (Type II-C)*	0.65	0.65	
1146	Safety-Kleen mineral spirits "C" (Type II-C)*	0.65	0.65	
1147	Exxon Exxol® D95 Fluid*	0.55	0.55	

1148	<u>Safety-Kleen mineral spirits "D" (Type II-C)*</u>	<u>0.65</u>	<u>0.65</u>	
1149	<u>Exxon Isopar® M Fluid*</u>	<u>0.54</u>	<u>0.54</u>	
1150	<u>thinning solvent/mineral spirits (Cal Poly SLO 1996)*</u>	<u>1.79</u>	<u>1.79</u>	
1151	<u>Aromatic 100®*</u>	<u>7.38</u>	<u>7.38</u>	
1152	<u>kerosene*</u>	<u>1.46</u>	<u>1.46</u>	<u>1.62</u>
1135				
1153	<u>regular mineral spirits*</u>	<u>1.73</u>	<u>1.73</u>	
1154	<u>reduced aromatics mineral spirits*</u>	<u>1.08</u>	<u>1.08</u>	
1155	<u>dearomatized alkanes, mixed, predominately C10-C12*</u>	<u>0.80</u>	<u>0.80</u>	
1156	<u>VMP naphtha*</u>	<u>1.12</u>	<u>1.12</u>	
1157	<u>synthetic isoparaffinic alkane mixture, predominately C10-C12*</u>	<u>0.68</u>	<u>0.68</u>	
1158	<u>oxo-tridecyl acetate</u>	<u>0.67</u>	<u>0.54</u>	<u>0.55</u>
1136				
1159	<u>oxo-dodecyl acetate</u>	<u>0.72</u>	<u>0.58</u>	<u>0.59</u>
1137				
1160	<u>oxo-decyl acetate</u>	<u>0.83</u>	<u>0.66</u>	<u>0.70</u>
1138				
1161	<u>oxo-nonyl acetate</u>	<u>0.85</u>	<u>0.69</u>	<u>0.72</u>
1139				
1162	<u>oxo-octyl acetate</u>	<u>0.96</u>	<u>0.78</u>	<u>0.81</u>
1140				
1163	<u>oxo-heptyl acetate</u>	<u>0.97</u>	<u>0.80</u>	<u>0.83</u>
1141				
1164	<u>oxo-hexyl acetate</u>	<u>1.03</u>	<u>0.84</u>	<u>0.86</u>
1142				
1165	<u>turpentine*</u>	<u>4.12</u>	<u>4.12</u>	<u>4.28</u>
1143				
1166	<u>soy methyl esters;</u>	<u>1.52</u>	<u>1.52</u>	<u>1.58</u>
1144	<u>alkyl C16-C18 methyl esters*</u>			

* This reactive organic compound was added to the Table of MIR Values on [30 days after the amendments are approved by the Office of Administrative Law], and may be used in aerosol coating products after this date, as specified in section 94522(h)(2)(B), title 17, California Code of Regulations

** ULMIR (as defined in section 94521(a)(71), title 17, California Code of Regulations.)

NOTE: Authority cited: Sections 39600, 39601, and 41712, Health and Safety Code. Reference: Sections 39002, 39600, 40000 and 41712, Health and Safety Code.

§ 94701. MIR Values for Hydrocarbon Solvents.

(a) Aliphatic Hydrocarbon Solvents

Bin	Average Boiling Point* (degrees F)	Criteria	MIR Value (July 18, 2001)	MIR Value (Effective Date)	<u>MIR Value (Effective Date)</u>
1	80-205	Alkanes (< 2% Aromatics)	2.08	1.33	<u>1.42</u>
2	80-205	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.59	1.23	<u>1.31</u>
3	80-205	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	2.52	1.53	<u>1.63</u>
4	80-205	Alkanes (2 to < 8% Aromatics)	2.24	1.37	<u>1.47</u>
5	80-205	Alkanes (8 to 22% Aromatics)	2.56	1.47	<u>1.56</u>
6	>205-340	Alkanes (< 2% Aromatics)	1.41	1.08	<u>1.17</u>
7	>205-340	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	1.17	0.95	<u>1.03</u>
8	>205-340	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.65	1.34	<u>1.44</u>
9	>205-340	Alkanes (2 to < 8% Aromatics)	1.62	1.35	<u>1.44</u>
10	>205-340	Alkanes (8 to 22% Aromatics)	2.03	1.88	<u>1.98</u>
11	>340-460	Alkanes (< 2% Aromatics)	0.91	0.63	<u>0.70</u>
12	>340-460	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.81	0.55	<u>0.62</u>
13	>340-460	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	1.01	0.79	<u>0.86</u>
14	>340-460	Alkanes (2 to < 8% Aromatics)	1.21	0.91	<u>0.99</u>
15	>340-460	Alkanes (8 to 22% Aromatics)	1.82	1.48	<u>1.57</u>
16	>460-580	Alkanes (< 2% Aromatics)	0.57	0.47	<u>0.52</u>
17	>460-580	N- & Iso-Alkanes (≥ 90% and < 2% Aromatics)	0.51	0.43	<u>0.48</u>
18	>460-580	Cyclo-Alkanes (≥ 90% and < 2% Aromatics)	0.63	0.54	<u>0.60</u>
19	>460-580	Alkanes (2 to < 8% Aromatics)	0.88	0.61	<u>0.66</u>
20	>460-580	Alkanes (8 to 22% Aromatics)	1.49	0.89	<u>0.95</u>

* Average Boiling Point = (Initial Boiling Point + Dry Point) / 2

(b) Aromatic Hydrocarbon Solvents

Bin	Boiling Range (degrees F)	Criteria	MIR Value (July 18, 2001)	MIR Value (Effective Date)	<u>MIR Value (Effective Date)</u>
21	280-290	Aromatic Content (≥ 98%)	7.37	7.44	<u>7.64</u>
22	320-350	Aromatic Content (≥ 98%)	7.51	7.39	<u>7.60</u>
23	355-420	Aromatic Content (≥ 98%)	8.07	6.66	<u>6.85</u>
24	450-535	Aromatic Content (≥ 98%)	5.00	3.76	<u>3.82</u>