

Attachment

Second 15-Day 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. The effective date of the New MIR Values will be 30 days after the amendments are approved by the Office of Administrative Law.
- 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 modifications that were made available by the first "15-day" notice on February 24, 2010, are shown in **bold double underline** to indicate additions and ~~double strikeout~~ to indicate deletions.
- 4) The additional proposed modifications made available by the second "15-day" notice are shown in single underline italics to indicate additions and ~~single strikeout italics~~ to indicate deletions.

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

§ 94700. MIR Values for Compounds.

#	<u>Organic Compound</u>	<u>MIR Value (July 18, 2001)</u>	<u>New MIR Value (Effective Date)</u>	<u>New MIR Value (Effective Date)</u>
	<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>	1.44	<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>	1.04	<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>	1.20	<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>	1.11	<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>	1.41	<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>	1.41	<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	<u>unspeciated C8 alkane(s)</u>	<u>1.64</u>	1.19	<u>1.27</u>
74	<u>n-nonane</u>	<u>0.95</u>	0.71	<u>0.78</u>
75	<u>branched C9 alkane(s)</u>	<u>1.25</u>	1.05	<u>1.14</u>
76	<u>2,2,5-trimethyl hexane</u>	<u>1.33</u>	1.06	<u>1.13</u>
77	<u>2,3,5-trimethyl hexane</u>	<u>1.33</u>	1.14	<u>1.22</u>
78	<u>2,4-dimethyl heptane</u>	<u>1.48</u>	1.29	<u>1.38</u>
79	<u>2-methyl octane</u>	<u>0.96</u>	0.75	<u>0.83</u>
80	<u>3,3-diethyl pentane</u>	<u>1.35</u>	1.14	<u>1.21</u>
81	<u>3,5-dimethyl heptane</u>	<u>1.63</u>	1.45	<u>1.56</u>
82	<u>4-ethyl heptane</u>	<u>1.44</u>	1.13	<u>1.22</u>
83	<u>4-methyl octane</u>	<u>1.08</u>	0.87	<u>0.95</u>
84	<u>2,4,4-trimethyl hexane*</u>	<u>1.26</u>	1.26	<u>1.34</u>
85	<u>3,3-dimethyl heptane*</u>	<u>1.05</u>	1.05	<u>1.13</u>
86	<u>4,4-dimethyl heptane*</u>	<u>1.19</u>	1.19	<u>1.27</u>
87	<u>2,2-dimethyl heptane*</u>	<u>0.93</u>	0.93	<u>1.00</u>
88	<u>2,2,4-trimethyl hexane*</u>	<u>1.19</u>	1.19	<u>1.26</u>
89	<u>2,6-dimethyl heptane*</u>	<u>0.96</u>	0.96	<u>1.04</u>
90	<u>2,3-dimethyl heptane*</u>	<u>1.01</u>	1.01	<u>1.09</u>
91	<u>2,5-dimethyl heptane*</u>	<u>1.25</u>	1.25	<u>1.35</u>
92	<u>3-methyl octane*</u>	<u>0.91</u>	0.91	<u>0.99</u>
93	<u>3,4-dimethyl heptane*</u>	<u>1.15</u>	1.15	<u>1.24</u>
94	<u>3-ethyl heptane*</u>	<u>1.01</u>	1.01	<u>1.10</u>
95	<u>cis-hydrindane; bicyclo[4.3.0]nonane*</u>	<u>1.20</u>	1.20	<u>1.31</u>
96	<u>C9 bicycloalkane(s)</u>	<u>1.57</u>	1.28	<u>1.39</u>
97	<u>1,2,3-trimethyl cyclohexane*</u>	<u>1.12</u>	1.12	<u>1.22</u>
98	<u>1,3,5-trimethyl cyclohexane*</u>	<u>1.06</u>	1.06	<u>1.15</u>
99	<u>1,1,3-trimethyl cyclohexane</u>	<u>1.37</u>	1.11	<u>1.19</u>
100	<u>1-ethyl-4-methyl cyclohexane</u>	<u>1.62</u>	1.33	<u>1.44</u>
101	<u>propyl cyclohexane</u>	<u>1.47</u>	1.19	<u>1.29</u>
102	<u>C9 cycloalkane(s)</u>	<u>1.55</u>	1.26	<u>1.36</u>
103	<u>unspeciated C9 alkane(s)</u>	<u>2.13</u>	0.99	<u>1.09</u>
104	<u>n-decane; n-C10</u>	<u>0.83</u>	0.62	<u>0.68</u>
105	<u>branched C10 alkane(s)</u>	<u>1.09</u>	0.86	<u>0.94</u>
106	<u>2,4,6-trimethyl heptane*</u>	<u>1.20</u>	1.20	<u>1.28</u>
107	<u>2,4-dimethyl octane</u>	<u>1.09</u>	0.95	<u>1.03</u>
108	<u>2,6-dimethyl octane</u>	<u>1.27</u>	1.00	<u>1.08</u>
109	<u>2-methyl nonane</u>	<u>0.86</u>	0.65	<u>0.73</u>
110	<u>3,4-diethyl hexane</u>	<u>1.20</u>	0.83	<u>0.89</u>
111	<u>3-methyl nonane</u>	<u>0.89</u>	0.68	<u>0.75</u>
112	<u>4-methyl nonane</u>	<u>0.99</u>	0.78	<u>0.86</u>
113	<u>4-propyl heptane</u>	<u>1.24</u>	0.94	<u>1.02</u>
114	<u>2,4,4-trimethyl heptane*</u>	<u>1.23</u>	1.23	<u>1.31</u>
115	<u>2,5,5-trimethyl heptane*</u>	<u>1.17</u>	1.17	<u>1.25</u>
116	<u>3,3-dimethyl octane*</u>	<u>1.01</u>	1.01	<u>1.09</u>
117	<u>4,4-dimethyl octane*</u>	<u>1.06</u>	1.06	<u>1.14</u>

118	<u>2,2-dimethyl octane*</u>	<u>0.77</u>	0.77	<u>0.83</u>
119	<u>2,2,4-trimethyl heptane*</u>	<u>1.09</u>	1.09	<u>1.16</u>
120	<u>2,2,5-trimethyl heptane*</u>	<u>1.18</u>	1.18	<u>1.26</u>
121	<u>2,3,6-trimethyl heptane*</u>	<u>0.82</u>	0.82	<u>0.90</u>
122	<u>2,3-dimethyl octane*</u>	<u>0.79</u>	0.79	<u>0.86</u>
123	<u>2,5-dimethyl octane*</u>	<u>0.94</u>	0.94	<u>1.03</u>
124	<u>2-methyl-3-ethyl heptane*</u>	<u>0.91</u>	0.91	<u>0.99</u>
125	<u>4-ethyl octane*</u>	<u>0.71</u>	0.71	<u>0.79</u>
126	<u>C10 bicycloalkane(s)</u>	<u>1.29</u>	1.00	<u>1.09</u>
127	<u>isobutyl cyclohexane;</u> <u>(2-methylpropyl) cyclohexane*</u>	<u>0.90</u>	0.90	<u>0.99</u>
128	<u>sec-butyl cyclohexane*</u>	<u>0.90</u>	0.90	<u>0.99</u>
129	<u>C10 cycloalkane(s)</u>	<u>1.27</u>	0.99	<u>1.07</u>
130	<u>1,3-diethyl cyclohexane</u>	<u>1.34</u>	1.16	<u>1.26</u>
131	<u>1,4-diethyl cyclohexane</u>	<u>1.49</u>	1.14	<u>1.23</u>
132	<u>1-methyl-3-isopropyl cyclohexane</u>	<u>1.26</u>	0.92	<u>1.00</u>
133	<u>butyl cyclohexane</u>	<u>1.07</u>	0.90	<u>0.99</u>
134	<u>unspeciated C10 alkane(s)</u>	<u>1.16</u>	0.82	<u>0.90</u>
135	<u>n-undecane; n-C11</u>	<u>0.74</u>	0.55	<u>0.61</u>
136	<u>branched C11 alkane(s)</u>	<u>0.87</u>	0.66	<u>0.73</u>
137	<u>2,3,4,6-tetramethyl heptane</u>	<u>1.26</u>	1.03	<u>1.11</u>
138	<u>2,6-dimethyl nonane</u>	<u>0.95</u>	0.72	<u>0.79</u>
139	<u>3,5-diethyl heptane</u>	<u>1.21</u>	1.02	<u>1.11</u>
140	<u>3-methyl decane</u>	<u>0.77</u>	0.58	<u>0.65</u>
141	<u>4-methyl decane</u>	<u>0.80</u>	0.61	<u>0.68</u>
142	<u>C11 bicycloalkane(s)</u>	<u>1.01</u>	0.83	<u>0.91</u>
143	<u>C11 cycloalkane(s)</u>	<u>0.99</u>	0.82	<u>0.90</u>
144	<u>1,3-diethyl-5-methyl cyclohexane</u>	<u>1.11</u>	0.96	<u>1.04</u>
145	<u>1-ethyl-2-propyl cyclohexane</u>	<u>0.95</u>	0.73	<u>0.81</u>
146	<u>pentyl cyclohexane</u>	<u>0.91</u>	0.77	<u>0.84</u>
147	<u>unspeciated C11 alkane(s)</u>	<u>0.90</u>	0.67	<u>0.74</u>
148	<u>n-dodecane; n-C12</u>	<u>0.66</u>	0.50	<u>0.55</u>
149	<u>branched C12 alkane(s)</u>	<u>0.80</u>	0.56	<u>0.63</u>
150	<u>2,3,5,7-tetramethyl octane</u>	<u>1.06</u>	0.84	<u>0.91</u>
151	<u>2,6-diethyl octane</u>	<u>1.09</u>	0.89	<u>0.97</u>
152	<u>3,6-dimethyl decane</u>	<u>0.88</u>	0.62	<u>0.70</u>
153	<u>3-methyl undecane</u>	<u>0.70</u>	0.53	<u>0.59</u>
154	<u>5-methyl undecane</u>	<u>0.72</u>	0.49	<u>0.55</u>
155	<u>C12 tricycloalkane(s)*</u>	<u>0.74</u>	0.74	<u>0.82</u>
156	<u>C12 bicycloalkane(s)</u>	<u>0.88</u>	0.73	<u>0.81</u>
157	<u>C12 cycloalkane(s)</u>	<u>0.87</u>	0.72	<u>0.80</u>
158	<u>1,3,5-triethyl cyclohexane</u>	<u>1.06</u>	0.94	<u>1.02</u>
159	<u>1-methyl-4-pentyl cyclohexane</u>	<u>0.81</u>	0.65	<u>0.72</u>
160	<u>hexyl cyclohexane</u>	<u>0.75</u>	0.57	<u>0.65</u>
161	<u>unspeciated C12 alkane(s)</u>	<u>0.81</u>	0.61	<u>0.66</u>
162	<u>n-tridecane; n-C13</u>	<u>0.62</u>	0.47	<u>0.53</u>
163	<u>branched C13 alkane(s)</u>	<u>0.73</u>	0.54	<u>0.60</u>
164	<u>2,3,6-trimethyl 4-isopropyl heptane</u>	<u>1.24</u>	0.85	<u>0.93</u>
165	<u>2,4,6,8-tetramethyl nonane</u>	<u>0.94</u>	0.69	<u>0.76</u>
166	<u>3,6-dimethyl undecane</u>	<u>0.82</u>	0.62	<u>0.69</u>
167	<u>3,7-diethyl nonane</u>	<u>1.08</u>	0.81	<u>0.89</u>

168	<u>3-methyl dodecane</u>	<u>0.64</u>	0.49	<u>0.54</u>
169	<u>5-methyl dodecane</u>	<u>0.64</u>	0.41	<u>0.47</u>
170	<u>C13 tricycloalkane(s)*</u>	<u>0.64</u>	0.64	<u>0.71</u>
171	<u>C13 bicycloalkane(s)</u>	<u>0.79</u>	0.64	<u>0.70</u>
172	<u>C13 cycloalkane(s)</u>	<u>0.78</u>	0.63	<u>0.70</u>
173	<u>1,3-diethyl-5-propyl cyclohexane</u>	<u>0.96</u>	0.89	<u>0.96</u>
174	<u>1-methyl-2-hexyl cyclohexane</u>	<u>0.70</u>	0.52	<u>0.58</u>
175	<u>heptyl cyclohexane</u>	<u>0.66</u>	0.49	<u>0.55</u>
176	<u>unspeciated C13 alkane(s)</u>	<u>0.73</u>	0.56	<u>0.61</u>
177	<u>n-tetradecane; n-C14</u>	<u>0.58</u>	0.46	<u>0.51</u>
178	<u>branched C14 alkane(s)</u>	<u>0.67</u>	0.49	<u>0.55</u>
179	<u>2,4,5,6,8-pentamethyl nonane</u>	<u>1.11</u>	0.87	<u>0.95</u>
180	<u>2-methyl 3,5-diisopropyl heptane</u>	<u>0.78</u>	0.49	<u>0.56</u>
181	<u>3,7-dimethyl dodecane</u>	<u>0.74</u>	0.56	<u>0.62</u>
182	<u>3,8-diethyl decane</u>	<u>0.68</u>	0.53	<u>0.60</u>
183	<u>3-methyl tridecane</u>	<u>0.57</u>	0.45	<u>0.51</u>
184	<u>6-methyl tridecane</u>	<u>0.62</u>	0.49	<u>0.46</u>
185	<u>C14 tricycloalkane(s)*</u>	<u>0.60</u>	0.60	<u>0.66</u>
186	<u>C14 bicycloalkane(s)</u>	<u>0.71</u>	0.59	<u>0.66</u>
187	<u>C14 cycloalkane(s)</u>	<u>0.71</u>	0.59	<u>0.65</u>
188	<u>1,3-dipropyl-5-ethyl cyclohexane</u>	<u>0.94</u>	0.84	<u>0.91</u>
189	<u>trans-1-methyl-4-heptyl cyclohexane</u>	<u>0.58</u>	0.47	<u>0.53</u>
190	<u>octyl cyclohexane</u>	<u>0.60</u>	0.45	<u>0.51</u>
191	<u>unspeciated C14 alkane(s)</u>	<u>0.67</u>	0.52	<u>0.57</u>
192	<u>n-pentadecane; n-C15</u>	<u>0.53</u>	0.44	<u>0.50</u>
193	<u>branched C15 alkane(s)</u>	<u>0.60</u>	0.45	<u>0.50</u>
194	<u>2,6,8-trimethyl 4-isopropyl nonane</u>	<u>0.76</u>	0.57	<u>0.63</u>
195	<u>3,7-dimethyl tridecane</u>	<u>0.64</u>	0.50	<u>0.55</u>
196	<u>3,9-diethyl undecane</u>	<u>0.62</u>	0.46	<u>0.51</u>
197	<u>3-methyl tetradecane</u>	<u>0.53</u>	0.43	<u>0.48</u>
198	<u>6-methyl tetradecane</u>	<u>0.57</u>	0.37	<u>0.42</u>
199	<u>C15 tricycloalkane(s)*</u>	<u>0.56</u>	0.56	<u>0.63</u>
200	<u>C15 bicycloalkane(s)</u>	<u>0.69</u>	0.56	<u>0.62</u>
201	<u>C15 cycloalkane(s)</u>	<u>0.68</u>	0.55	<u>0.61</u>
202	<u>1,3,5-tripropyl cyclohexane</u>	<u>0.90</u>	0.84	<u>0.87</u>
203	<u>1-methyl-2-octyl cyclohexane</u>	<u>0.60</u>	0.45	<u>0.50</u>
204	<u>nonyl cyclohexane</u>	<u>0.54</u>	0.41	<u>0.47</u>
205	<u>1,3-diethyl-5-pentyl cyclohexane</u>	<u>0.99</u>	0.61	<u>0.66</u>
206	<u>unspeciated C15 alkane(s)</u>	<u>0.61</u>	0.49	<u>0.54</u>
207	<u>n-hexadecane; n-C16</u>	<u>0.52</u>	0.39	<u>0.45</u>
208	<u>branched C16 alkane(s)</u>	<u>0.54</u>	0.42	<u>0.47</u>
209	<u>2,7-dimethyl 3,5-diisopropyl heptane</u>	<u>0.69</u>	0.47	<u>0.52</u>
210	<u>3-methyl pentadecane</u>	<u>0.50</u>	0.41	<u>0.46</u>
211	<u>4,8-dimethyl tetradecane</u>	<u>0.55</u>	0.44	<u>0.49</u>
212	<u>7-methyl pentadecane</u>	<u>0.51</u>	0.40	<u>0.45</u>
213	<u>C16 tricycloalkane(s)*</u>	<u>0.53</u>	0.53	<u>0.59</u>
214	<u>C16 bicycloalkane(s)*</u>	<u>0.52</u>	0.52	<u>0.58</u>
215	<u>C16 cycloalkane(s)</u>	<u>0.61</u>	0.49	<u>0.55</u>
216	<u>1,3-propyl-5-butyl cyclohexane</u>	<u>0.77</u>	0.69	<u>0.75</u>
217	<u>1-methyl-4-nonyl cyclohexane</u>	<u>0.55</u>	0.41	<u>0.46</u>
218	<u>decyl cyclohexane</u>	<u>0.50</u>	0.38	<u>0.43</u>

219	unspeciated C16 alkane(s)	<u>0.55</u>	0.45	<u>0.49</u>
220	n-heptadecane; n-C17	<u>0.49</u>	0.37	<u>0.42</u>
221	branched C17 alkane(s)	<u>0.51</u>	0.40	<u>0.44</u>
222	C17 tricycloalkane(s)*	<u>0.50</u>	0.50	<u>0.55</u>
223	C17 bicycloalkane(s)*	<u>0.49</u>	0.49	<u>0.55</u>
224	C17 cycloalkane(s)*	<u>0.46</u>	0.46	<u>0.52</u>
225	unspeciated C17 alkane(s)	<u>0.52</u>	0.43	<u>0.46</u>
226	n-octadecane; 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>	6.44	<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>	14.70	<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>	12.24	<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	<u>cis-2-pentene</u>	<u>10.24</u>	40.07	10.38
270	<u>trans-2-pentene</u>	<u>10.23</u>	40.25	10.56
271	<u>2-pentenenes</u>	<u>10.23</u>	40.16	10.47
272	<u>C5 internal alkenes</u>	<u>10.23</u>	40.16	10.47
273	<u>cyclopentene</u>	<u>7.38</u>	6.55	6.77
274	<u>trans-1,3-pentadiene*</u>	<u>12.10</u>	42.10	12.50
275	<u>cis-1,3-pentadiene*</u>	<u>12.10</u>	42.10	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>	40.28	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>	5.12	5.26
290	<u>2,3-dimethyl-2-butene</u>	<u>13.32</u>	42.13	12.49
291	<u>2-methyl-2-pentene</u>	<u>12.28</u>	40.70	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>	42.15	12.49
296	<u>trans-3-methyl-2-pentene*</u>	<u>14.17</u>	42.81	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>	42.44	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>	40.03	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	<u>4.49</u>
321	<u>C7 terminal alkenes</u>	<u>4.20</u>	4.25	<u>4.43</u>
322	<u>4,4-dimethyl-cis-2-pentene*</u>	<u>6.45</u>	6.45	<u>6.64</u>
323	<u>2,4-dimethyl-2-pentene*</u>	<u>9.03</u>	9.03	<u>9.29</u>
324	<u>2-methyl-2-hexene*</u>	<u>9.22</u>	9.22	<u>9.47</u>
325	<u>3-ethyl-2-pentene*</u>	<u>9.49</u>	9.49	<u>9.75</u>
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>	6.10	<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>	9.80	<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>	6.41	<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>	4.40	<u>4.55</u>
381	<u>sabinene</u>	<u>3.67</u>	4.04	<u>4.19</u>
382	<u>terpinolene*</u>	<u>6.16</u>	6.46	<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>	1.78	<u>1.87</u>
387	<u>C11 terminal alkenes</u>	<u>1.95</u>	1.78	<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>	1.44	<u>1.48</u>
402	<u>C13 terminal alkenes</u>	<u>1.55</u>	1.44	<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>	1.95	<u>2.03</u>
408	<u>1-tetradecene</u>	<u>1.41</u>	1.27	<u>1.34</u>
409	<u>C14 terminal alkenes</u>	<u>1.41</u>	1.27	<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>	1.77	<u>1.85</u>
415	<u>1-pentadecene</u>	<u>1.27</u>	1.19	<u>1.25</u>
416	<u>C15 terminal alkenes</u>	<u>1.27</u>	1.19	<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>	1.63	<u>1.71</u>

	Aromatic Hydrocarbons			
422	benzene	<u>0.81</u>	0.69	0.72
423	toluene	<u>3.97</u>	3.88	4.00
424	ethyl benzene	<u>2.79</u>	2.93	3.04
425	<i>m</i> -xylene	<u>10.61</u>	9.52	9.75
426	<i>o</i> -xylene	<u>7.49</u>	7.44	7.64
427	<i>p</i> -xylene	<u>4.25</u>	5.69	5.84
428	C8 disubstituted benzenes	<u>7.48</u>	7.57	7.76
429	isomers of ethylbenzene	<u>5.16</u>	6.39	6.57
430	styrene	<u>1.95</u>	1.65	1.73
431	unspeciated C8 aromatics*	<u>7.42</u>	7.42	7.64
432	C9 monosubstituted benzenes	<u>2.20</u>	1.95	2.03
433	<i>n</i> -propyl benzene	<u>2.20</u>	1.95	2.03
434	isopropyl benzene; cumene	<u>2.32</u>	2.43	2.52
435	C9 disubstituted benzenes	<u>6.61</u>	5.65	5.81
436	<i>m</i> -ethyl toluene	<u>9.37</u>	7.21	7.39
437	<i>o</i> -ethyl toluene	<u>6.61</u>	5.43	5.59
438	<i>p</i> -ethyl toluene	<u>3.75</u>	4.32	4.44
439	C9 trisubstituted benzenes	<u>9.90</u>	10.58	10.87
440	1,2,3-trimethyl benzene	<u>11.26</u>	11.66	11.97
441	1,2,4-trimethyl benzene	<u>7.18</u>	8.64	8.87
442	1,3,5-trimethyl benzene	<u>11.22</u>	11.44	11.76
443	isomers of propyl benzene	<u>6.12</u>	6.06	6.23
444	indene	<u>3.21</u>	1.48	1.55
445	indane	<u>3.17</u>	3.20	3.32
446	allylbenzene*	<u>1.45</u>	1.45	1.53
447	α -methyl styrene	<u>1.72</u>	1.45	1.53
448	C9 styrenes	<u>1.72</u>	1.45	1.53
449	β -methyl styrene*	<u>0.95</u>	0.95	1.01
450	unspeciated C9 aromatics*	<u>7.92</u>	7.92	7.99
451	C10 monosubstituted benzenes	<u>1.97</u>	2.27	2.36
452	<i>n</i> -butyl benzene	<u>1.97</u>	2.27	2.36
453	<i>sec</i> -butyl benzene	<u>1.97</u>	2.27	2.36
454	<i>tert</i> -butyl benzene*	<u>1.89</u>	1.89	1.95
455	<i>o</i> -cymene; 1-methyl-2-(1-methylethyl) benzene*	<u>5.34</u>	5.34	5.49
456	1-methyl-2- <i>n</i> -propyl benzene*	<u>5.34</u>	5.34	5.49
457	<i>m</i> -cymene; 1-methyl-3-(1-methylethyl) benzene*	<u>6.92</u>	6.92	7.10
458	1-methyl-3- <i>n</i> -propyl benzene*	<u>6.92</u>	6.92	7.10
459	1-methyl-4- <i>n</i> -propyl benzene*	<u>4.31</u>	4.31	4.43
460	C10 disubstituted benzenes	<u>5.92</u>	5.53	5.68
461	<i>m</i> -C10 disubstituted benzenes*	<u>6.92</u>	6.92	7.10
462	<i>o</i> -C10 disubstituted benzenes*	<u>5.34</u>	5.34	5.49
463	<i>p</i> -C10 disubstituted benzenes*	<u>4.31</u>	4.31	4.43
464	<i>m</i> -diethyl benzene	<u>8.39</u>	6.92	7.10
465	<i>o</i> -diethyl benzene	<u>5.92</u>	5.34	5.49
466	1-methyl-4-isopropyl benzene; <i>p</i> -cymene*	<u>4.32</u>	4.32	4.44
467	<i>p</i> -diethyl benzene	<u>3.36</u>	4.31	4.43
468	1,2,3-C10 trisubstituted benzenes*	<u>9.89</u>	9.89	10.15
469	1,2,4-C10 trisubstituted benzenes*	<u>7.35</u>	7.35	7.55

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>	9.01	<u>9.26</u>
472	<u>1,2,4,5-tetramethyl benzene*</u>	<u>9.01</u>	9.01	<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>	9.01	<u>9.26</u>
480	<u>C10 trisubstituted benzenes</u>	<u>8.86</u>	9.01	<u>9.26</u>
481	<u>C10 tetrasubstituted benzenes</u>	<u>8.86</u>	9.01	<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>	7.91	<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>	7.91	<u>8.13</u>
505	<u>C11 tetrasubstituted benzenes</u>	<u>8.03</u>	7.91	<u>8.13</u>
506	<u>C11 pentasubstituted benzenes</u>	<u>8.03</u>	7.91	<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>	4.11	<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>	4.11	<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	C15 trisubstituted benzenes*	5.35	5.35	5.50
571	1,2,3-C15 trisubstituted benzenes*	5.77	5.77	5.94
572	1,2,4-C15 trisubstituted benzenes*	4.35	4.35	4.47
573	1,3,5-C15 trisubstituted benzenes*	5.92	5.92	6.10
574	C15 tetralins or indanes*	1.87	1.87	1.94
575	C15 naphthalenes*	2.97	2.97	3.06
576	unspeciated C15 aromatics*	3.35	3.35	3.20
577	C16 monosubstituted benzenes*	1.32	1.32	1.38
578	<i>m</i> -C16 disubstituted benzenes*	3.60	3.60	3.71
579	<i>o</i> -C16 disubstituted benzenes*	2.74	2.74	2.83
580	<i>p</i> -C16 disubstituted benzenes*	2.30	2.30	2.38
581	C16 disubstituted benzenes*	2.88	2.88	2.97
582	1,2,3-C16 trisubstituted benzenes*	5.31	5.31	5.46
583	1,2,4-C16 trisubstituted benzenes*	4.01	4.01	4.13
584	1,3,5-C16 trisubstituted benzenes*	5.47	5.47	5.63
585	C16 trisubstituted benzenes*	4.93	4.93	5.07
586	C16 tetralins or indanes*	1.75	1.75	1.82
587	C16 naphthalenes*	2.77	2.77	2.86
588	unspeciated C16 aromatics*	2.96	2.96	2.79
589	C17 monosubstituted benzenes*	1.24	1.24	1.30
590	C17 disubstituted benzenes*	2.71	2.71	2.79
591	C17 trisubstituted benzenes*	4.63	4.63	4.77
592	C17 tetralins or indanes*	1.64	1.64	1.70
593	C17 naphthalenes*	2.60	2.60	2.68
594	C18 monosubstituted benzenes*	1.17	1.17	1.23
595	C18 disubstituted benzenes*	2.55	2.55	2.63
596	C18 trisubstituted benzenes*	4.37	4.37	4.49
597	C18 tetralins or indanes*	1.55	1.55	1.61
598	C18 naphthalenes*	2.45	2.45	2.53
599	C19 monosubstituted benzenes*	1.11	1.11	1.16
600	C19 disubstituted benzenes*	2.42	2.42	2.49
601	C19 trisubstituted benzenes*	4.13	4.13	4.25
602	C19 tetralins or indanes*	1.46	1.46	1.52
603	C19 naphthalenes*	2.31	2.31	2.39
604	C20 monosubstituted benzenes*	1.05	1.05	1.10
605	C20 disubstituted benzenes*	2.29	2.29	2.36
606	C20 trisubstituted benzenes*	3.92	3.92	4.04
607	C20 tetralins or indanes*	1.39	1.39	1.44
608	C20 naphthalenes*	2.19	2.19	2.26
609	C21 monosubstituted benzenes*	1.00	1.00	1.05
610	C21 disubstituted benzenes*	2.18	2.18	2.25
611	C21 trisubstituted benzenes*	3.73	3.73	3.84
612	C21 tetralins or indanes*	1.32	1.32	1.37
613	C21 naphthalenes*	2.08	2.08	2.15
614	C22 monosubstituted benzenes*	0.96	0.96	1.00
615	C22 disubstituted benzenes*	2.08	2.08	2.14
616	C22 trisubstituted benzenes*	3.56	3.56	3.66
617	C22 tetralins or indanes*	1.26	1.26	1.31
618	C22 naphthalenes*	1.98	1.98	2.05
	Oxygenated Organics			
619	carbon monoxide	0.06	0.053	0.056

620	<u>formaldehyde</u>	<u>8.97</u>	9.24	9.46
621	<u>methanol</u>	<u>0.71</u>	0.65	0.67
622	<u>formic acid</u>	<u>0.08</u>	0.06	0.07
623	<u>ethylene oxide</u>	<u>0.04</u>	0.04	0.04
624	<u>acetaldehyde</u>	<u>6.84</u>	6.34	6.54
625	<u>ethanol</u>	<u>1.69</u>	1.45	1.53
626	<u>dimethyl ether</u>	<u>0.93</u>	0.76	0.81
627	<u>glyoxal</u>	<u>14.22</u>	12.13	12.50
628	<u>methyl formate</u>	<u>0.06</u>	0.05	0.06
629	<u>acetic acid</u>	<u>0.50</u>	0.66	0.68
630	<u>glycolaldehyde*</u>	<u>4.96</u>	4.96	5.10
631	<u>ethylene glycol</u>	<u>3.36</u>	3.01	3.13
632	<u>glycolic acid</u>	<u>2.67</u>	2.32	2.38
633	<u>peroxyacetic acid</u>	<u>12.62</u>	0.52	0.54
634	<u>acrolein</u>	<u>7.60</u>	7.24	7.45
635	<u>trimethylene oxide</u>	<u>5.22</u>	4.32	4.56
636	<u>propylene oxide</u>	<u>0.32</u>	0.28	0.29
637	<u>propionaldehyde</u>	<u>7.89</u>	6.83	7.08
638	<u>acetone</u>	<u>0.43</u>	0.35	0.36
639	<u>isopropyl alcohol</u>	<u>0.71</u>	0.59	0.61
640	<u>n-propyl alcohol</u>	<u>2.74</u>	2.38	2.50
641	<u>acrylic acid</u>	<u>11.66</u>	11.10	11.38
642	<u>methyl glyoxal</u>	<u>16.21</u>	16.02	16.56
643	<u>1,3-dioxolane</u>	<u>5.47</u>	4.73	4.96
644	<u>ethyl formate</u>	<u>0.52</u>	0.45	0.48
645	<u>methyl acetate</u>	<u>0.07</u>	0.07	0.07
646	<u>propionic acid</u>	<u>0.79</u>	1.17	1.22
647	<u>hydroxy acetone</u>	<u>3.08</u>	3.15	3.23
648	<u>propylene glycol</u>	<u>2.75</u>	2.48	2.58
649	<u>dimethoxy methane</u>	<u>1.04</u>	0.89	0.94
650	<u>2-methoxy ethanol</u>	<u>2.98</u>	2.83	2.93
651	<u>dimethyl carbonate; DMC</u>	<u>0.06</u>	0.06	0.06
652	<u>dihydroxy acetone</u>	<u>4.02</u>	3.89	3.99
653	<u>glycerol</u>	<u>3.27</u>	3.05	3.15
654	<u>furan</u>	<u>16.54</u>	8.86	9.15
655	<u>crotonaldehyde</u>	<u>10.07</u>	9.14	9.39
656	<u>methacrolein</u>	<u>6.23</u>	5.84	6.01
657	<u>cyclobutanone</u>	<u>0.68</u>	0.59	0.62
658	<u>methylvinyl ketone</u>	<u>8.73</u>	9.39	9.65
659	<u>tetrahydrofuran</u>	<u>4.95</u>	4.10	4.31
660	<u>1,2-epoxy butane</u>	<u>1.02</u>	0.86	0.91
661	<u>2-methyl propanal</u>	<u>5.87</u>	5.05	5.25
662	<u>butanal</u>	<u>6.74</u>	5.75	5.97
663	<u>C4 aldehydes</u>	<u>6.74</u>	5.75	5.97
664	<u>methyl ethyl ketone</u>	<u>1.49</u>	1.43	1.48
665	<u>isobutyl alcohol</u>	<u>2.24</u>	2.41	2.51
666	<u>n-butyl alcohol</u>	<u>3.34</u>	2.76	2.88
667	<u>sec-butyl alcohol</u>	<u>1.60</u>	1.39	1.36
668	<u>tert-butyl alcohol</u>	<u>0.45</u>	0.39	0.41
669	<u>diethyl ether</u>	<u>4.01</u>	3.64	3.76
670	<u>gamma-butyrolactone</u>	<u>1.15</u>	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	20.73	19.43	20.09
676	1,4-dioxane	2.71	2.48	2.62
677	ethyl acetate	0.64	0.59	0.63
678	methyl propionate	0.71	0.63	0.66
679	n-propyl formate	0.93	0.73	0.78
680	isopropyl formate	0.42	0.35	0.37
681	isobutyric acid	1.22	1.15	1.20
682	butanoic acid	1.78	1.75	1.82
683	methoxy-acetone	2.14	1.94	2.03
684	1,3-butanediol*	3.21	3.21	3.36
685	1,2-butanediol	2.21	2.43	2.52
686	1,4-butanediol	3.22	2.64	2.72
687	2,3-butanediol*	4.23	4.23	4.38
688	1-methoxy-2-propanol	2.62	2.33	2.44
689	2-ethoxy-ethanol	3.78	3.57	3.71
690	2-methoxy-1-propanol	3.01	2.92	3.01
691	3-methoxy-1-propanol	4.01	3.74	3.84
692	propylene carbonate	0.25	0.27	0.28
693	methyl lactate	2.75	2.59	2.67
694	diethylene glycol	3.55	3.23	3.35
695	malic acid	7.51	6.77	6.94
696	2-methyl furan*	8.02	8.02	8.30
697	3-methyl furan*	6.64	6.64	6.90
698	cyclopentanone	1.43	1.08	1.15
699	C5 cyclic ketones	1.43	1.08	1.15
700	cyclopentanol	1.96	1.65	1.72
701	α -methyl tetrahydrofuran	4.62	3.78	3.97
702	tetrahydropyran	3.81	3.05	3.22
703	2-methyl-3-butene-2-ol	5.12	4.73	4.91
704	2,2-dimethylpropanal; pivaldehyde	5.40	4.74	4.89
705	3-methylbutanal; isovaleraldehyde	5.52	4.79	4.97
706	pentanal; valeraldehyde	5.76	4.89	5.08
707	C5 aldehydes	5.76	4.89	5.08
708	2-pentanone	3.07	2.70	2.81
709	3-pentanone	1.45	1.18	1.24
710	C5 ketones	3.07	2.70	2.81
711	methyl isopropyl ketone	1.64	1.58	1.65
712	2-pentanol	1.74	1.54	1.61
713	3-pentanol	1.73	1.56	1.63
714	pentyl alcohol	3.35	2.74	2.83
715	isoamyl alcohol; 3-methyl-1-butanol	2.73	3.04	3.16
716	2-methyl-1-butanol	2.60	2.39	2.40
717	ethyl isopropyl ether	3.86	3.64	3.74
718	methyl n-butyl ether	3.66	2.99	3.15
719	methyl tert -butyl ether; MTBE	0.78	0.79	0.73
720	ethyl acrylate	8.78	7.55	7.77
721	methyl methacrylate	15.84	15.22	15.61

722	glutaraldehyde	<u>4.79</u>	4.44	<u>4.31</u>
723	lumped C5+ unsaturated carbonyl species*	<u>6.18</u>	6.48	<u>6.38</u>
724	2,4-pentanedione	<u>1.02</u>	0.98	<u>1.01</u>
725	tetrahydro-2-furanmethanol; tetrahydrofurfuryl alcohol	<u>3.54</u>	3.49	<u>3.31</u>
726	ethyl propionate	<u>0.79</u>	0.73	<u>0.77</u>
727	isopropyl acetate	<u>1.12</u>	1.03	<u>1.07</u>
728	methyl butyrate	<u>1.18</u>	1.04	<u>1.09</u>
729	methyl isobutyrate	<u>0.70</u>	0.58	<u>0.61</u>
730	n-butyl formate	<u>0.95</u>	0.77	<u>0.83</u>
731	propyl acetate	<u>0.87</u>	0.73	<u>0.78</u>
732	3-methyl butanoic acid	<u>4.26</u>	4.14	<u>4.23</u>
733	2,2-dimethoxy-propane	<u>0.52</u>	0.46	<u>0.48</u>
734	1-ethoxy-2-propanol	<u>3.25</u>	2.96	<u>3.09</u>
735	2-propoxy-ethanol	<u>3.52</u>	3.17	<u>3.30</u>
736	3-ethoxy-1-propanol	<u>4.24</u>	3.94	<u>4.09</u>
737	3-methoxy-1-butanol	<u>0.97</u>	3.75	<u>3.87</u>
738	2-methoxyethyl acetate	<u>1.18</u>	1.08	<u>1.15</u>
739	ethyl lactate	<u>2.71</u>	2.39	<u>2.48</u>
740	methyl isopropyl carbonate	<u>0.69</u>	0.59	<u>0.62</u>
741	2-(2-methoxyethoxy) ethanol	<u>2.90</u>	2.54	<u>2.66</u>
742	pentaerythritol	<u>2.42</u>	2.09	<u>2.17</u>
743	phenol	<u>1.82</u>	2.69	<u>2.76</u>
744	2-ethyl furan*	<u>6.85</u>	6.85	<u>7.09</u>
745	2,5-dimethyl furan*	<u>7.60</u>	7.60	<u>7.88</u>
746	cyclohexanone	<u>1.61</u>	1.26	<u>1.35</u>
747	C6 cyclic ketones	<u>1.61</u>	1.26	<u>1.35</u>
748	mesityl oxide; 2-methyl-2-penten-4-one	<u>17.37</u>	6.34	<u>6.51</u>
749	cyclohexanol	<u>2.25</u>	1.84	<u>1.95</u>
750	hexanal	<u>4.98</u>	4.18	<u>4.35</u>
751	C6 aldehydes	<u>4.98</u>	4.18	<u>4.35</u>
752	4-methyl-2-pentanone	<u>4.31</u>	3.74	<u>3.88</u>
753	methyl n-butyl ketone	<u>3.55</u>	3.00	<u>3.14</u>
754	methyl tert-butyl ketone	<u>0.78</u>	0.62	<u>0.65</u>
755	C6 ketones	<u>3.55</u>	3.00	<u>3.14</u>
756	1-hexanol	<u>2.74</u>	2.56	<u>2.69</u>
757	2-hexanol	<u>2.46</u>	1.97	<u>2.08</u>
758	4-methyl-2-pentanol; methyl isobutyl carbinol	<u>2.89</u>	2.52	<u>2.64</u>
759	di-n-propyl ether	<u>3.24</u>	2.93	<u>3.08</u>
760	ethyl n-butyl ether	<u>3.86</u>	3.33	<u>3.48</u>
761	ethyl tert-butyl ether	<u>2.11</u>	1.93	<u>2.01</u>
762	methyl tert-amyl ether; TAME	<u>2.14</u>	1.64	<u>1.69</u>
763	diisopropyl ether	<u>3.56</u>	3.39	<u>3.52</u>
764	ethyl methacrylate*	<u>12.15</u>	12.15	<u>12.47</u>
765	ethyl butyrate	<u>1.25</u>	1.14	<u>1.17</u>
766	isobutyl acetate	<u>0.67</u>	0.58	<u>0.62</u>
767	methyl pivalate	<u>0.39</u>	0.33	<u>0.35</u>
768	n-butyl acetate	<u>0.89</u>	0.78	<u>0.83</u>
769	n-propyl propionate	<u>0.93</u>	0.79	<u>0.84</u>
770	sec-butyl acetate	<u>1.43</u>	1.25	<u>1.32</u>
771	tert-butyl acetate; tBAC	<u>0.20</u>	0.17	<u>0.18</u>

772	diacetone alcohol	0.68	0.57	0.60
773	methyl pentanoate; methyl valerate*	1.00	1.00	1.05
774	1,2-dihydroxyhexane	2.75	2.45	2.55
775	2-methyl-2,4-pentanediol	1.04	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	0.21	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	1.10	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; TAAE	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	<u>2-methyl-1-butyl acetate</u>	<u>1.17</u>	1.04	<u>1.08</u>
820	<u>methyl hexanoate*</u>	<u>0.96</u>	0.96	<u>1.02</u>
821	<u>1-tert-butoxy-2-propanol</u>	<u>1.71</u>	1.53	<u>1.61</u>
822	<u>2-tert-butoxy-1-propanol</u>	<u>1.81</u>	1.75	<u>1.81</u>
823	<u>n-butoxy-2-propanol;</u> <u>propylene glycol n-butyl ether</u>	<u>2.70</u>	2.59	<u>2.72</u>
824	<u>ethyl 3-ethoxy propionate</u>	<u>3.61</u>	3.46	<u>3.58</u>
825	<u>diisopropyl carbonate</u>	<u>1.04</u>	0.94	<u>0.98</u>
826	<u>2-(2-propoxyethoxy) ethanol</u>	<u>3.00</u>	2.74	<u>2.85</u>
827	<u>dipropylene glycol methyl ether;[±]</u> <u>1-methoxy-2-(2-hydroxypropoxy)-propane</u>	<u>2.21</u>	1.87	<u>1.98</u>
828	<u>dipropylene glycol methyl ether;[±]</u> <u>2-(2-methoxypropoxy)-1-propanol</u>	<u>2.70</u>	2.46	<u>2.58</u>
829	<u>1,2-propylene glycol diacetate</u>	<u>0.94</u>	0.58	<u>0.61</u>
830	<u>dimethyl glutarate</u>	<u>0.51</u>	0.39	<u>0.42</u>
831	<u>2-[2-(2-methoxyethoxy) ethoxy] ethanol</u>	<u>2.62</u>	2.44	<u>2.58</u>
832	<u>tolualdehyde</u>	<u>0.00</u>	0.00	<u>0.00</u>
833	<u>4-vinyl phenol*</u>	<u>1.43</u>	1.43	<u>1.50</u>
834	<u>2,4-dimethyl phenol*</u>	<u>2.07</u>	2.07	<u>2.12</u>
835	<u>2,5-dimethyl phenol*</u>	<u>2.07</u>	2.07	<u>2.12</u>
836	<u>3,4-dimethyl phenol*</u>	<u>2.07</u>	2.07	<u>2.12</u>
837	<u>2,3-dimethyl phenol*</u>	<u>2.07</u>	2.07	<u>2.12</u>
838	<u>2,6-dimethyl phenol*</u>	<u>2.07</u>	2.07	<u>2.12</u>
839	<u>C8 alkyl phenols</u>	<u>2.07</u>	2.07	<u>2.12</u>
840	<u>β-phenethyl alcohol; 2-phenyl ethyl alcohol*</u>	<u>4.41</u>	4.44	<u>4.53</u>
841	<u>C8 cyclic ketones</u>	<u>1.25</u>	0.98	<u>1.05</u>
842	<u>2-butyl tetrahydrofuran</u>	<u>2.53</u>	2.00	<u>2.13</u>
843	<u>octanal</u>	<u>3.65</u>	3.03	<u>3.16</u>
844	<u>C8 aldehydes</u>	<u>3.65</u>	3.03	<u>3.16</u>
845	<u>2-octanone</u>	<u>1.66</u>	1.34	<u>1.40</u>
846	<u>C8 ketones</u>	<u>1.66</u>	1.34	<u>1.40</u>
847	<u>1-octanol</u>	<u>2.01</u>	1.35	<u>1.43</u>
848	<u>2-ethyl-1-hexanol</u>	<u>2.20</u>	1.90	<u>2.00</u>
849	<u>2-octanol</u>	<u>2.16</u>	1.86	<u>1.97</u>
850	<u>3-octanol</u>	<u>2.57</u>	2.16	<u>2.28</u>
851	<u>4-octanol</u>	<u>3.07</u>	2.10	<u>2.23</u>
852	<u>5-methyl-1-heptanol</u>	<u>1.95</u>	1.70	<u>1.79</u>
853	<u>di-isobutyl ether</u>	<u>1.29</u>	1.12	<u>1.20</u>
854	<u>di-n-butyl ether</u>	<u>3.17</u>	2.70	<u>2.84</u>
855	<u>2-phenoxyethanol; ethylene glycol phenyl ether</u>	<u>3.61</u>	4.35	<u>4.49</u>
856	<u>butyl methacrylate</u>	<u>9.09</u>	8.47	<u>8.70</u>
857	<u>isobutyl methacrylate</u>	<u>8.99</u>	8.39	<u>8.62</u>
858	<u>hexyl acetates*</u>	<u>0.74</u>	0.74	<u>0.80</u>
859	<u>2,3-dimethylbutyl acetate</u>	<u>0.84</u>	0.70	<u>0.75</u>
860	<u>2-methylpentyl acetate</u>	<u>1.11</u>	0.94	<u>0.98</u>
861	<u>3-methylpentyl acetate</u>	<u>1.31</u>	1.00	<u>1.07</u>
862	<u>4-methylpentyl acetate</u>	<u>0.92</u>	0.76	<u>0.82</u>
863	<u>isobutyl isobutyrate</u>	<u>0.61</u>	0.55	<u>0.60</u>
864	<u>n-butyl butyrate</u>	<u>1.12</u>	1.02	<u>1.08</u>
865	<u>n-hexyl acetate</u>	<u>0.87</u>	0.63	<u>0.69</u>
866	<u>methyl amyl acetate;</u>	<u>1.46</u>	1.28	<u>1.35</u>

	<u>4-methyl-2-pentanol acetate</u>			
867	<u>n-pentyl propionate</u>	<u>0.79</u>	0.66	<u>0.71</u>
868	<u>2-ethyl hexanoic acid</u>	<u>3.49</u>	3.19	<u>3.32</u>
869	<u>methyl heptanoate*</u>	<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; 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)- 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 isomer #1</u>	<u>1.41</u>	1.30	<u>1.38</u>
912	<u>dipropylene glycol methyl ether acetate isomer #2</u>	<u>1.58</u>	1.43	<u>1.52</u>

913	dipropylene glycol methyl ether acetate isomers	<u>1.49</u>	1.37	<u>1.45</u>
914	2-[2-(2-propoxyethoxy) ethoxy] ethanol	<u>2.46</u>	2.05	<u>2.17</u>
915	tripropylene glycol*	<u>2.07</u>	2.07	<u>2.18</u>
916	2,5,8,11-tetraoxatridecan-13-ol	<u>2.15</u>	1.86	<u>1.97</u>
917	glyceryl triacetate	<u>0.57</u>	0.54	<u>0.55</u>
918	anethol; <i>p</i> -propenyl-anisole*	<u>0.76</u>	0.76	<u>0.80</u>
919	C10 alkyl phenols	<u>1.68</u>	1.68	<u>1.73</u>
920	camphor*	<u>0.45</u>	0.45	<u>0.49</u>
921	α -terpineol	<u>5.16</u>	4.50	<u>4.63</u>
922	citronellol; 3,7-dimethyl-6-octen-1-ol*	<u>5.63</u>	5.63	<u>5.79</u>
923	hydroxycitronella*	<u>2.50</u>	2.50	<u>2.61</u>
924	C10 cyclic ketones	<u>1.02</u>	0.80	<u>0.86</u>
925	menthol	<u>1.70</u>	1.35	<u>1.43</u>
926	linalool*	<u>5.28</u>	5.28	<u>5.43</u>
927	2-decanone	<u>1.06</u>	0.82	<u>0.90</u>
928	C10 ketones	<u>1.06</u>	0.82	<u>0.90</u>
929	8-methyl-1-nonanol; isodecyl alcohol	<u>1.23</u>	0.99	<u>1.06</u>
930	1-decanol	<u>1.22</u>	1.00	<u>1.06</u>
931	3,7-dimethyl-1-octanol	<u>1.42</u>	1.13	<u>1.20</u>
932	di-n-pentyl ether	<u>2.64</u>	2.02	<u>2.15</u>
933	1,2-diacetyl benzene*	<u>2.17</u>	2.17	<u>2.25</u>
934	2,4-dimethylhexyl acetate	<u>0.93</u>	0.70	<u>0.76</u>
935	2-ethyl-hexyl acetate	<u>0.79</u>	0.60	<u>0.66</u>
936	3,4-dimethyl-hexyl acetate	<u>1.16</u>	0.84	<u>0.87</u>
937	3,5-dimethyl-hexyl acetate	<u>1.09</u>	0.92	<u>0.99</u>
938	3-ethyl-hexyl acetate	<u>1.03</u>	0.84	<u>0.91</u>
939	3-methyl-heptyl acetate	<u>0.76</u>	0.64	<u>0.67</u>
940	4,5-dimethyl-hexyl acetate	<u>0.86</u>	0.63	<u>0.68</u>
941	4-methyl-heptyl acetate	<u>0.72</u>	0.60	<u>0.66</u>
942	5-methyl-heptyl acetate	<u>0.73</u>	0.55	<u>0.61</u>
943	n-octyl acetate	<u>0.64</u>	0.52	<u>0.57</u>
944	geraniol*	<u>4.97</u>	4.97	<u>5.12</u>
945	methyl nonanoate*	<u>0.54</u>	0.54	<u>0.59</u>
946	2-(2-ethylhexyloxy) ethanol	<u>1.71</u>	1.45	<u>1.55</u>
947	propylparaben*; 4-hydroxybenzoic acid, propyl ester	<u>1.40</u>	1.40	<u>1.44</u>
948	2-(2-hexyloxyethoxy) ethanol	<u>2.03</u>	1.73	<u>1.84</u>
949	glycol ether DPnB; dipropylene glycol n-butyl ether; 1-(2-butoxy-1-methylethoxy)-2-propanol)	<u>1.96</u>	1.73	<u>1.83</u>
950	2-(2-butoxyethoxy) ethyl acetate	<u>1.38</u>	1.30	<u>1.38</u>
951	2-[2-(2-butoxyethoxy) ethoxy] ethanol	<u>2.24</u>	1.85	<u>1.96</u>
952	tripropylene glycol monomethyl ether	<u>1.90</u>	1.84	<u>1.92</u>
953	C11 alkyl phenols	<u>1.54</u>	1.54	<u>1.58</u>
954	2-ethyl-hexyl acrylate	<u>2.42</u>	2.43	<u>2.52</u>
955	2,3,5-trimethyl-hexyl acetate	<u>0.86</u>	0.79	<u>0.85</u>
956	2,3-dimethyl-heptyl acetate	<u>0.84</u>	0.65	<u>0.71</u>
957	2,4-dimethyl-heptyl acetate	<u>0.88</u>	0.62	<u>0.68</u>
958	2,5-dimethyl-heptyl acetate	<u>0.86</u>	0.72	<u>0.78</u>
959	2-methyloctyl acetate	<u>0.63</u>	0.47	<u>0.52</u>
960	3,5-dimethyl-heptyl acetate	<u>1.01</u>	0.74	<u>0.81</u>

961	<u>3,6-dimethyl-heptyl acetate</u>	<u>0.87</u>	0.74	<u>0.78</u>
962	<u>3-ethyl-heptyl acetate</u>	<u>0.71</u>	0.57	<u>0.63</u>
963	<u>4,5-dimethyl-heptyl acetate</u>	<u>0.96</u>	0.63	<u>0.69</u>
964	<u>4,6-dimethyl-heptyl acetate</u>	<u>0.83</u>	0.72	<u>0.78</u>
965	<u>4-methyloctyl acetate</u>	<u>0.68</u>	0.56	<u>0.61</u>
966	<u>5-methyloctyl acetate</u>	<u>0.67</u>	0.5	<u>0.56</u>
967	<u>n-nonyl acetate</u>	<u>0.58</u>	0.47	<u>0.52</u>
968	<u>methyl decanoate*</u>	<u>0.48</u>	0.48	<u>0.53</u>
969	<u>C12 alkyl phenols</u>	<u>1.42</u>	1.42	<u>1.46</u>
970	<u>2,6,8-trimethyl-4-nonanone;</u> <u>isobutyl heptyl ketone</u>	<u>1.86</u>	1.57	<u>1.66</u>
971	<u>trimethylnonanolthreoerythro;</u> <u>2,6,8-trimethyl-4-nonanol</u>	<u>1.55</u>	1.24	<u>1.33</u>
972	<u>3,6-dimethyl-octyl acetate</u>	<u>0.88</u>	0.72	<u>0.79</u>
973	<u>3-isopropyl-heptyl acetate</u>	<u>0.71</u>	0.49	<u>0.54</u>
974	<u>4,6-dimethyl-octyl acetate</u>	<u>0.85</u>	0.70	<u>0.76</u>
975	<u>methyl undecanoate*</u>	<u>0.45</u>	0.45	<u>0.50</u>
976	<u>1-hydroxy-2,2,4-trimethylpentyl-3-isobutyrate</u>	<u>0.92</u>	0.84	<u>0.89</u>
977	<u>3-hydroxy-2,2,4-trimethylpentyl-1-isobutyrate</u>	<u>0.88</u>	0.72	<u>0.77</u>
978	<u>2,2,4-trimethyl-1,3-pentanediol</u> <u>monoisobutyrate and isomers (texanol®)</u>	<u>0.89</u>	0.76	<u>0.81</u>
979	<u>substituted C7 ester (C12)</u>	<u>0.92</u>	0.76	<u>0.81</u>
980	<u>substituted C9 ester (C12)</u>	<u>0.89</u>	0.76	<u>0.81</u>
981	<u>diethylene glycol mono-(2-ethylhexyl) ether*</u>	<u>1.46</u>	1.46	<u>1.56</u>
982	<u>diethyl phthalate*</u>	<u>1.56</u>	1.56	<u>1.62</u>
983	<u>dimethyl sebacate</u>	<u>0.48</u>	0.40	<u>0.43</u>
984	<u>diisopropyl adipate</u>	<u>1.42</u>	1.22	<u>1.28</u>
985	<u>3,6,9,12-tetraoxa-hexadecan-1-ol</u>	<u>1.90</u>	1.62	<u>1.72</u>
986	<u>triethyl citrate*</u>	<u>0.66</u>	0.66	<u>0.70</u>
987	<u>3,5,7-trimethyl-octyl acetate</u>	<u>0.83</u>	0.60	<u>0.66</u>
988	<u>3-ethyl-6-methyl-octyl acetate</u>	<u>0.80</u>	0.57	<u>0.63</u>
989	<u>4,7-dimethyl-nonyl acetate</u>	<u>0.64</u>	0.45	<u>0.50</u>
990	<u>methyl dodecanoate; methyl laurate</u>	<u>0.53</u>	0.42	<u>0.47</u>
991	<u>tripropylene glycol n-butyl ether*</u>	<u>1.55</u>	1.55	<u>1.64</u>
992	<u>amyl cinnamal*</u>	<u>3.06</u>	3.06	<u>3.16</u>
993	<u>isobornyl methacrylate</u>	<u>8.64</u>	5.37	<u>5.51</u>
994	<u>2,3,5,7-tetramethyl-octyl acetate</u>	<u>0.74</u>	0.57	<u>0.62</u>
995	<u>3,5,7-trimethyl-nonyl acetate</u>	<u>0.76</u>	0.56	<u>0.62</u>
996	<u>3,6,8-trimethyl-nonyl acetate</u>	<u>0.72</u>	0.53	<u>0.59</u>
997	<u>methyl tridecanoate*</u>	<u>0.40</u>	0.40	<u>0.45</u>
998	<u>hexyl cinnamal*</u>	<u>2.86</u>	2.86	<u>2.96</u>
999	<u>2,6-di-tert-butyl-p-cresol*</u>	<u>1.15</u>	1.15	<u>1.18</u>
1000	<u>2-ethyl-hexyl benzoate*</u>	<u>0.93</u>	0.93	<u>0.98</u>
1001	<u>2,4,6,8-tetramethyl-nonyl acetate</u>	<u>0.63</u>	0.46	<u>0.51</u>
1002	<u>3-ethyl-6,7-dimethyl-nonyl acetate</u>	<u>0.76</u>	0.55	<u>0.61</u>
1003	<u>4,7,9-trimethyl-decyl acetate</u>	<u>0.55</u>	0.37	<u>0.42</u>
1004	<u>methyl myristate; methyl tetradecanoate</u>	<u>0.47</u>	0.39	<u>0.43</u>
1005	<u>methyl cis-9-pentadecenoate*</u>	<u>1.63</u>	1.73	<u>1.80</u>
1006	<u>methyl cis-9-hexadecenoate;</u> <u>methyl palmitoleate*</u>	<u>1.63</u>	1.64	<u>1.70</u>
1007	<u>methyl pentadecanoate*</u>	<u>0.42</u>	0.42	<u>0.47</u>

1008	<u>2,3,5,6,8-pentamethyl-nonyl acetate</u>	<u>0.74</u>	0.59	0.65
1009	<u>3,5,7,9-tetramethyl-decyl acetate</u>	<u>0.58</u>	0.43	0.48
1010	<u>5-ethyl-3,6,8-trimethyl-nonyl acetate</u>	<u>0.77</u>	0.71	0.77
1011	<u>dibutyl phthalate*</u>	<u>1.20</u>	1.20	1.25
1012	<u>2,2,4-trimethyl-1,3-pentanediol diisobutyrate*</u>	<u>0.34</u>	0.34	0.38
1013	<u>methyl hexadecanoate; methyl palmitate*</u>	<u>0.40</u>	0.40	0.44
1014	<u>methyl <i>cis</i>-9-heptadecenoate*</u>	<u>1.56</u>	1.56	1.62
1015	<u>methyl heptadecanoate; methyl margarate*</u>	<u>0.38</u>	0.38	0.42
1016	<u>methyl linolenate; methyl <i>cis,cis,cis</i>-9,12,15-octadecatrienoate*</u>	<u>1.77</u>	2.23	2.32
1017	<u>methyl linoleate; methyl <i>cis,cis</i>-9,12-octadecadienoate*</u>	<u>1.48</u>	1.77	1.84
1018	<u>methyl <i>cis</i>-9-octadecenoate; methyl oleate*</u>	<u>1.48</u>	1.48	1.54
1019	<u>methyl octadecanoate; methyl stearate*</u>	<u>0.36</u>	0.36	0.40
	Other Organic Compounds			
1020	<u>methylamine*</u>	<u>7.29</u>	7.29	7.70
1021	<u>methyl chloride</u>	<u>0.03</u>	0.04	0.04
1022	<u>methyl nitrite*</u>	<u>10.50</u>	10.50	10.84
1023	<u>nitromethane</u>	<u>7.86</u>	0.07	0.07
1024	<u>carbon disulfide*</u>	<u>0.23</u>	0.23	0.25
1025	<u>dichloromethane</u>	<u>0.07</u>	0.04	0.04
1026	<u>methyl bromide</u>	<u>0.02</u>	0.02	0.02
1027	<u>chloroform</u>	<u>0.03</u>	0.02	0.02
1028	<u>methyl iodide*</u>	<u>0.00</u>	0.00	0.00
1029	<u>carbon tetrachloride</u>	<u>0.00</u>	0.00	0.00
1030	<u>chloropicrin; trichloro-nitro-methane*</u>	<u>1.80</u>	1.80	1.85
1031	<u>methylene bromide</u>	<u>0.00</u>	0.00	0.00
1032	<u>acetylene</u>	<u>1.25</u>	0.93	0.95
1033	<u>dimethyl amine</u>	<u>9.37</u>	2.95	3.17
1034	<u>ethyl amine</u>	<u>7.80</u>	5.48	5.78
1035	<u>ethanolamine</u>	<u>5.97</u>	6.53	6.81
1036	<u>vinyl chloride</u>	<u>2.92</u>	2.70	2.83
1037	<u>ethyl chloride</u>	<u>0.25</u>	0.27	0.29
1038	<u>1,1-difluoroethane; HFC-152a</u>	<u>0.00</u>	0.02	0.02
1039	<u>methyl isothiocyanate*; MITC</u>	<u>0.31</u>	0.31	0.32
1040	<u>nitroethane</u>	<u>12.79</u>	0.06	0.06
1041	<u>dimethyl sulfoxide; DMSO</u>	<u>6.90</u>	6.46	6.68
1042	<u>chloroacetaldehyde*</u>	<u>12.00</u>	12.00	12.30
1043	<u>1,1-dichloroethene*</u>	<u>1.69</u>	1.69	1.79
1044	<u><i>trans</i>-1,2-dichloroethene</u>	<u>0.81</u>	1.65	1.70
1045	<u><i>cis</i>-1,2-dichloroethene*</u>	<u>1.65</u>	1.65	1.70
1046	<u>1,1-dichloroethane</u>	<u>0.10</u>	0.07	0.07
1047	<u>1,2-dichloroethane</u>	<u>0.10</u>	0.24	0.21
1048	<u>1,1,1,2-tetrafluoroethane; HFC-134a</u>	<u>0.00</u>	0.00	0.00
1049	<u>ethyl bromide</u>	<u>0.11</u>	0.12	0.13
1050	<u>trichloroethylene; TCE</u>	<u>0.60</u>	0.64	0.64
1051	<u>1,1,1-trichloroethane</u>	<u>0.00</u>	0.04	0.01
1052	<u>1,1,2-trichloroethane</u>	<u>0.06</u>	0.08	0.09
1053	<u>perchloroethylene; PERC</u>	<u>0.04</u>	0.03	0.03
1054	<u>1,2-dibromoethane</u>	<u>0.05</u>	0.10	0.10
1055	<u>methyl acetylene</u>	<u>6.45</u>	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	6.93	7.23
1059	n-methyl acetamide**	19.70	19.63	20.19
1060	1-amino-2-propanol	13.42	5.47	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	trans-1,3-dichloropropene*	4.92	4.92	5.03
1066	cis-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	trans-1,3,3,3-tetrafluoropropene*; trans-HFO-1234ze	0.09	0.09	0.10
1070	2,3,3,3-tetrafluoropropene*; HFO-1234yf	0.27	0.27	0.28
1071	n-propyl bromide	0.35	0.40	0.42
1072	1,1,1,3,3-pentafluoropropane*; HFC-245fa	0.00	0.00	0.00
1073	3,3-dichloro-1,1,1,2,2-pentafluoropropane; HCFC-225ca*	0.00	0.00	0.00
1074	1,3-dichloro-1,1,2,2,3-pentafluoropropane; HCFC-225cb*	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; DMAE	4.76	5.41	5.62
1083	2-amino-1-butanol*	4.78	4.78	4.98
1084	2-amino-2-methyl-1-propanol; AMP	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*; HFE-7100 isomer	0.05	0.05	0.06
1095	methyl nonafluoro-isobutyl ether*; HFE-7100 isomer	0.05	0.05	0.06
1096	methoxy-perfluoro-n-butane*; 1094 methyl-nonafluoro-butyl ether; HFE-7100 isomer	0.00	0.00	0.00
1097	methoxy-perfluoro-isobutene*; 1095 methyl-nonafluoro-isobutyl ether; HFE-7100 isomer	0.00	0.00	0.00
1098	1,1,1,2,2,3,4,5,5,5-decafluoropentane;	0.00	0.00	0.00
1096	HFC-43-10mee*			

1099 1097	triethyl amine	16.60	3.66	3.84
1100 1098	triethylene diamine*	3.31	3.34	3.46
1101 1099	monochlorobenzene	0.36	0.34	0.32
1102 1100	nitrobenzene	0.07	0.05	0.06
1103 1101	<i>p</i> -dichlorobenzene	0.20	0.17	0.18
1104 1102	<i>o</i> -dichlorobenzene*	0.17	0.17	0.18
1105 1103	triethanolamine*	2.76	4.08	4.21
1106 1104	hexamethyl-disiloxane*	0.00	0.00	0.00
1107 1105	hydroxymethyl-disiloxane*	0.00	0.00	0.00
1108 1106	hexafluoro-benzene*	0.05	0.05	0.05
1109 1107	ethoxy-perfluoro- <i>n</i> -butane*; <i>ethyl</i> <i>nonafluorobutyl ether; HFE-7200 isomer</i>	0.01	0.01	0.01
1100 1108	ethoxy-perfluoro-isobutane*; <i>ethyl</i> <i>nonafluoroisobutyl ether; HFE-7200 isomer</i>	0.01	0.01	0.01
1111	<i>ethyl nonafluorobutyl ether</i> *; <i>HFE-7200 isomer</i>	0.19	0.19	0.21
1112	<i>ethyl nonafluoroisobutyl ether</i> *; <i>HFE-7200 isomer</i>	0.19	0.19	0.21
1113 1109	perfluoro- <i>n</i> -hexane*	0.00	0.00	0.00
1114 1110	2-chlorotoluene*	2.82	2.82	2.92
1115 1111	<i>m</i> -nitrotoluene*	0.48	0.48	0.50
1116 1112	benzotrifluoride	0.26	0.28	0.29
1117 1113	<i>p</i> -trifluoromethyl-chloro-benzene	0.11	0.12	0.13
1118 1114	<i>p</i> -toluene isocyanate	0.93	1.03	1.06
1119 1115	3-(chloromethyl)-heptane*	0.88	0.88	0.95
1120 1116	cyclosiloxane D4; octamethylcyclotetrasiloxane*	0.00	0.00	0.00
1121 1117	cumene hydroperoxide; 1-methyl-1- phenylethylhydroperoxide**	12.61	8.83	9.08
1122 1118	2,4-toluene diisocyanate*	0.00	0.00	0.00
1123 1119	2,6-toluene diisocyanate*	0.00	0.00	0.00
1124 1120	toluene diisocyanate (mixed isomers)*	0.00	0.00	0.00
1125 1121	molinate; S-ethyl hexahydro-1 <i>H</i> -azepine-1-carbothioate*	1.43	1.43	1.51
1126 1122	EPTC; S-ethyl dipropyl-thiocarbamate*	1.58	1.58	1.67

1127	triisopropanolamine*	2.60	2.60	2.70
1123				
1128	dexpanthenol; pantothenylol**	9.35	5.98	6.15
1124				
1129	pebulate; S-propyl butylethylthiocarbamate*	1.58	1.58	1.67
1125				
1130	cyclosiloxane D5;	0.00	0.00	0.00
1126	decamethylcyclopentasiloxane*			
1131	thiobencarb;	0.65	0.65	0.68
1127	S-[4-chlorobenzyl] N,N-diethylthiolcarbamate*			
1132	methylene diphenylene diisocyanate	0.79	0.87	0.89
1128				
1133	lauryl pyrrolidone*	0.89	0.89	0.94
1129				
	Complex Mixtures			
1134	base ROG mixture	3.71	3.50	3.60
1130				
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	Safety-Kleen mineral spirits "D" (Type II-C)*	0.65	0.65	
1149	Exxon Isopar® M Fluid*	0.54	0.54	
1150	thinning solvent/mineral spirits (Cal Poly SLO 1996)*	1.79	1.79	
1151	Aromatic 100®*	7.38	7.38	
1152	kerosene*	1.46	1.46	1.62
1135				
1131				
1153	regular mineral spirits*	1.73	1.73	
1154	reduced aromatics mineral spirits*	1.08	1.08	
1155	dearomatized alkanes, mixed, predominately C10-C12*	0.80	0.80	
1156	VMP-naphtha*	1.12	1.12	
1157	synthetic isoparaffinic alkane mixture, predominately C10-C12*	0.68	0.68	
1158	oxo-tridecyl acetate	0.67	0.54	0.55
1136				
1132				
1159	oxo-dodecyl acetate	0.72	0.58	0.59
1137				
1133				

1160 1138 1134	oxo-decyl acetate	<u>0.83</u>	0.66	<u>0.70</u>
1161 1139 1135	oxo-nonyl acetate	<u>0.85</u>	0.69	<u>0.72</u>
1162 1140 1136	oxo-octyl acetate	<u>0.96</u>	0.78	<u>0.81</u>
1163 1141 1137	oxo-heptyl acetate	<u>0.97</u>	0.80	<u>0.83</u>
1164 1142 1138	oxo-hexyl acetate	<u>1.03</u>	0.84	<u>0.86</u>
1165 1143 1139	turpentine*	<u>4.12</u>	4.12	<u>4.28</u>
1166 1144 1140	soy methyl esters; alkyl C16-C18 methyl esters*	<u>1.52</u>	1.52	<u>1.58</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>