

**Table 8b.** List of aromatic hydrocarbons in human body.

CAS-number	Compound name	Formula	Faeces	Urine	Breath	Skin	Milk	Blood	Saliva	Semen
71-43-2	benzene <i>benzyl, phenyl</i>	C <sub>6</sub> H <sub>6</sub>	[9, 222]	[256-258]	[6, 29, 57, 61, 106, 259, 260, 265, 273, 274, 278, 282, 284, 285, 301, 302, 308, 311, 316, 323, 324, 330, 332, 340, 345, 358, 363-365, 368, 372, 377, 378, 381, 391, 393, 404-407]	[178]	[155, 157, 160, 161]	[106, 121, 123, 125, 130, 131, 136, 138, 141]	[110, 113, 418]	
108-88-3	toluene / methyl benzene	C <sub>7</sub> H <sub>8</sub>	[9, 222, 223]	[193, 194, 197, 250, 255-258]	[6, 29, 55, 57, 61, 106, 260, 265, 268, 277, 285, 296, 302, 308, 311, 323, 324, 340, 341, 351, 358, 363, 364, 365, 368, 372, 378, 384, 391, 393, 404, 406, 407]	[178, 185]	[155-157, 160, 161, 167]	[106, 121, 123, 124, 125, 130, 131, 136, 138, 141]	[110, 113, 114, 418]	
536-74-3	phenyl acetylene	C <sub>8</sub> H <sub>6</sub>					[155]			

100-42-5	styrene	C8H8	[9, 222]	[193, 255]	[6, 57, 61, 106, 118, 265, 269, 275, 277, 285, 292, 295, 296, 302, 308, 324, 364, 378, 384, 406]	[178, 409]	[155, 161]	[106, 124, 130, 131, 136, 138, 140]	[110, 111, 114, 418]
100-41-4	ethylbenzene	C8H10	[9, 222, 247]	[256]	[6, 57, 61, 106, 259, 265, 277, 285, 296, 302, 308, 311, 323, 324, 332, 340, 344, 358, 369, 384, 391, 406]	[178]	[155, 156, 161]	[106, 121, 124, 130, 131, 136, 138, 141, 140]	[117]
1330-20-7	xylene ui / dimethylbenzene	C8H10		[193, ]58,	55, 57, 61, [285, 302, 323, 324, 341, 358, 391]	[409]	[155, 161]	[124, 131]	[117]
106-42-3	p-xylene / 1,4-dimethylbenzene	C8H10	[9, 222]		[6, 106, 118, 261, 265, 294, 308, 311, 340, 351, 369, 378]	[178]	[167]	[106, 125, 136, 138, 141, 140]	[110]
108-38-3	m-xylene / 1,3-dimethylbenzene	C8H10	[9]		[261, 274, 294, 296, 308, 366, 378, 408]			[121, 123, 130, 136, 138, 140, 141]	

95-47-6	o-xylene / 1,2-dimethylbenzene	C8H10	[9, 222]	[6, 57, 61, 106, 277, 285, 308, 341, 344, 364, 372, 374, 391, 393, 404, 406] [408]	[161]	[106, 125, 130, 136, 138, 141]	[110]
300-57-2	1-benzylethene / Allylbenzene	C9H10					
873-49-4	cyclopropylbenzene	C9H10	[9, 222]				
1319-73-9	methyl styrene ui	C9H10			[155]		
611-15-4	2-methylstyrene / o-Vinyltoluene	C9H10		[6, 380]			
622-97-9	1-methyl-4-vinylbenzene	C9H10		[408]			
98-83-9	alpha-methylstyrene / 2-Phenyl-1-propene	C9H10		[6, 106, 344]		[106]	
637-50-3	1-phenyl-1-propene	C9H10		[408]			
611-14-3	1-ethyl-2-methylbenzene / 2-ethyltoluene	C9H12	[222]	[6, 274]	[156]	[130]	
620-14-4	1-ethyl-3-methylbenzene / 3-ethyltoluene	C9H12		[6, 57, 265, 344, 374]	[409]	[156]	
622-96-8	1-ethyl-4-methylbenzene / 4-ethyltoluene	C9H12	[9]	[61, 285, 408]	[156]		
103-65-1	propylbenzene	C9H12		[274, 294, 332, 353, 374, 378, 380]	[178]		
98-82-8	cumene / (1-methylethyl)-benzene	C9H12	[222]	[296, 408]	[409]	[124]	

108-67-8	1,3,5-trimethylbenzene / mesitylene	C9H12			[6, 57, 61, 277, 285, 300]				
526-73-8	1,2,3-trimethylbenzene	C9H12	[222]	[196, 202]	[6, 294, 374, 380]	[409]	[156]	[124]	[113]
95-63-6	1,2,4-trimethylbenzene / 1,2,4-TMB	C9H12		[250]	[6, 308, 341, 378, 380, 392]		[156]		
108-57-6	1,3-divinylbenzene	C10H10			[408]				
105-06-6	1,4-divinylbenzene	C10H10			[6]				
2039-90-9	1,3-dimethyl-2- ethenylbenzene	C10H12			[408]				
2234-20-0	2,4-dimethylstyrene	C10H12			[6]				
5379-20-4	1,3-dimethyl-5-vinylbenzene	C10H12			[408]				
27831-13-6	4-ethenyl-1,2- dimethylbenzene	C10H12	[9]		[408]				
7525-62-4	m-ethylstyrene	C10H12			[408]				
1195-32-0	1-methyl-4-(1- methylethenyl)-benzene / p, $\alpha$ - dimethyl-styrene / dehydro-p- cymene / p-cymenene	C10H12	[9, 222]	[193, 194, 254]	[408]	[410]			[110]
26444-18-8	1-methyl-2-(1- methylethenyl)-benzene / o- isopropenyltoluene	C10H12	[9]						
3290-53-7	2-methyl-2-propenylbenzene	C10H12	[222]	[256]					
768-49-0	(2-methylpropenyl)-benzene / $\beta,\beta$ -Dimethylstyrene	C10H12			[57, 275, 408]				

824-90-8	1-phenyl-1-butene / 1-butenylbenzene	C10H12			[6]				[131]
1560-06-1	1-phenyl 2-butene	C10H12			[275, 408]				
2039-93-2	2-phenyl-1-butene	C10H12			[408]				
488-23-3	1,2,3,4-tetramethylbenzene	C10H14		[250]	[408]				
527-53-7	1,2,3,5-tetramethylbenzene	C10H14			[408]				
95-93-2	1,2,4,5-tetramethylbenzene	C10H14		[194]	[408]				
933-98-2	1,2-dimethyl-3-ethyl benzene	C10H14			[408]				
934-80-5	4-ethyl-1,2-dimethylbenzene	C10H14	[9]		[408]				[131]
934-74-7	1,3-dimethyl-5-ethyl benzene	C10H14			[408]				
1758-88-9	2-ethyl-1,4-dimethylbenzene / 2-ethyl-p-xylene	C10H14			[374, 408]				[130]
874-41-9	1-ethyl-2,4-dimethylbenzene / 4-ethyl-m-xylene	C10H14			[6]				[130]
2870-04-4	2-Ethyl-m-xylene	C10H14			[275]				
1074-55-1	p-methylpropylbenzene	C10H14		[256, 258]	[408]				
1074-43-7	1-Methyl-3-Propylbenzene	C10H14			[374]				
1074-17-5	1-methyl-2-n-propyl benzene	C10H14			[408]				
527-84-4	o-cymene / 1-methyl-2-(1-methylethyl)-benzene	C10H14	[9, 222]	[194, 254, 257, 258]	[6, 265, 275, 364]				[111, 113]
99-87-6	p-cymene / 1-methyl-4-(1-methylethyl)-benzene / 4-cymene	C10H14		[194, 196, 250, 254]	[6, 106, 407]	[176, 182, 410]	[163]	[106]	[110]
535-77-3	1-methyl-3-(1-methylethyl)-benzene / m-cymene / m-isopropyltoluene	C10H14	[9]	[193, 194, 196, 254, 250]	[294, 408]				[131]
25155-1-1	o/p-Cymene	C10H14			[57]				
104-51-8	1-butylbenzene	C10H14			[274, 380, 408]				

4489-84-3	(3-methyl-2-butenyl)-benzene	C11H14			[110]
81676-11-1	1-methyl-4-(1-methyl-2-propenyl)-benzene	C11H14			[110]
17851-27-3	1-ethyl-2,4,5-trimethylbenzene	C11H16	[294]		
4706-89-2	2,4-dimethyl-1-(1-methylethyl)-benzene	C11H16			[110]
4706-90-5	1,3-dimethyl-5-(1-methylethyl)benzene	C11H16	[294]		
1595-16-0	1-methyl-4-(1-methylpropyl)-benzene	C11H16			[110]
538-68-1	Benzene, pentyl-	C11H16	[274, 380]		
7338-50-3	(2,4-Cyclopentadien-1-ylidenemethyl)-benzene	C12H10		[167]	
5557-93-7	1-(1-methylethenyl)-2-(1-methylethyl)benzene	C12H16	[294]		
1129-29-9	1-(1-methylethenyl)-3-(1-methylethyl)-benzene	C12H16			[110]
2388-14-9	1-(1-methylethenyl)-4-(1-methylethyl)-benzene	C12H16			[110]
1077-16-3	hexylbenzene	C12H18	[274, 380]	[167]	[110]
19219-84-2	Benzene, (1,3-dimethylbutyl)-	C12H18	[274]		
n/a	Benzen241,2,3triethyl-5methyl	C13H20	[364]		
1595-10-4	1-methyl-2-n-hexylbenzene	C13H20			[110]
1078-71-3	1-phenylheptane / heptylbenzene	C13H20	[274, 383, 408]		[110]
1014-60-4	1,3-bis(1,1-dimethylethyl)-benzene	C14H22	[223]		[113]
10375-96-9	Benzene, 1,4-dimethyl-2,5-bis(1-methylethyl)-(2,5-Diisopropyl-p-xylene)	C14H22			[241]

na	1-phenyl-5-methylheptane	C14H22			[274]		
4176-17-4	ar-curcumene / 1-methyl-4-[(2R)-6-methylhept-5-en-2-yl]benzene	C15H22					[110]
644-30-4	1-(1,5-dimethyl-4-hexen-1-yl)-4-methylbenzene	C15H22	[9]	[194]			
4621-36-7	1-ethyloctylbenzene	C16H26					[125]
na	Benzene, 1,1'-(1-methyl-2-butynylidene)bis	C17H16			[364]		
4536-88-3	2-phenylundecane / 1-methyldecyl-benzene	C17H28				[182]	[125]
4536-87-2	3-phenylundecane / 1-ethylnonylbenzene	C17H28				[182]	[125]
4536-86-1	4-phenylundecane / 1-propyloctylbenzene	C17H28				[182]	[125]
4537-15-9	5-phenylundecane / (1-butylheptyl)-benzene	C17H28				[409,182]	
4537-14-8	6-phenylundecane	C17H28					[420]
2719-61-1	2-phenyldodecane / Benzene,(1-methylundecyl)-	C18H30				[182, 409]	
2719-63-3	5-phenyldodecane	C18H30				[182]	
2719-62-2	6-phenyldodecane / 1-pentylheptylbenzene	C18H30				[182, 409]	[125]
27854-40-6	2-Methyl-2-phenyl undecane	C18H30		[253]			
4534-53-6	2-phenyltridecane	C19H32				[182]	
4534-52-5	3-phenyltridecane	C19H32				[182]	
4534-51-4	4-phenyltridecane	C19H32				[182]	
4534-49-0	6-phenyltridecane	C19H32				[182]	
4443-59-8	5-Cyclohexylicosane	C26H52			[344]		
25340-17-4	diethylbenzene ui	C30H42					[131]

135-01-3	1,2-diethylbenzene	C30H42		[408]	
141-93-5	1,3-diethylbenzene	C30H42		[408]	
105-05-5	1,4-diethylbenzene	C30H42		[408]	
28652-72-4	biphenyl methyl biphenyl ui	C13H12			[182] [420]
643-58-3	2-Methyl-1,1'-biphenyl	C13H12		[380]	
92-52-4	1,1'-biphenyl	C12H10		[61, 274, 287, 344, 380, 408]	
644-08-6	4-Methyl-1,1'-biphenyl	C13H12			[118]
3075-84-1	2,2',5,5'-Tetramethylbiphenyl	C16H18		[344]	
13049-35-9	2,2'-diethyl-1,1'-biphenyl	C16H18			[118]
<i>Indanes / indenenes</i>					
496-11-7	indane	C9H10	[222]	[374, 408]	
874-35-1	5-methylindane / 2,3-dihydro-5-methyl-(1H)-indene	C10H12		[374]	
17059-48-2	2,3-dihydro-1,6-dimethyl-1H-indene	C11H14		[294]	
6682-71-9	2,3-dihydro-4,7-dimethyl-1H-indene	C11H14		[294]	
<i>1,2,3,4-tetrahydronaphthalenes, dihydronaphthalenes</i>					
30364-38-6	1,2-dihydro-1,1,6-trimethylnaphthalene	C13H16		[194, 196, 250, 254]	
475-03-6	1,2,3,4-Tetrahydro-1,1,6-trimethyl-naphthalene / ionene	C13H18		[250, 254]	
21693-55-0	1,2,3,4-Tetrahydro-1,5,7-trimethyl-naphthalene	C13H18		[250, 254]	



21391-99-1	alpha-calacorene / 1-Isopropyl-4,7-dimethyl-1,2-dihydronaphthalene	C15H20	[196, 194]				[110]
6617-49-8	calamenene ui / L-calamenene / 4-Isopropyl-1,6-dimethyl-1,2,3,4-tetrahydronaphthalene	C15H22	[254]				[110]
<i>Naphthalenes</i>							
91-20-3	naphthalene	C10H8	[9]	[6, 61, 274, 285, 353, 369, 391]	[185]	[155]	[418, 117]
90-12-0	1-methylnaphthalene	C11H10		[294]			[112, 118]
91-57-6	2-methylnaphthalene	C11H10		[294, 380]			
827-54-3	2-ethenylnaphthalene	C12H10		[287]			
581-42-0	2,6-Dimethyl-naphthalene	C12H12	[250]				
571-61-9	1,5-Dimethylnaphthalene	C12H12		[344]			
2131-41-1	1,4,5-Trimethyl-naphthalene	C13H14	[250]				
2245-38-7	1,6,7-Trimethylnaphthalene	C13H14	[254]				
483-78-3	cadalene	C15H18					[110]
24157-81-1	2,6-Diisopropylnaphthalene	C16H20				[118]	
<i>Azulenes</i>							
489-84-9	Azulol / 7-Isopropyl-1,4-dimethylazulene	C15H18	[254]				
<i>Anthracenes</i>							
85-01-8	phenanthrene	C14H10		[61, 285]			
120-12-7	anthracene	C14H10		[61, 285]			
<i>Acenaphths</i>							
86-73-7	Fluorene	C13H10		[61, 285]			
208-96-8	Acenaphthylene	C12H8		[61, 285]			

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83-32-9	Acenaphthene	C12H10	[61, 285]	
206-44-0	fluoranthene	C16H10	[61, 285]	
129-00-0	Pyrene	C16H10	[61, 285]	
222-51-5	dibenzopentaphene	C30H18		[130]

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