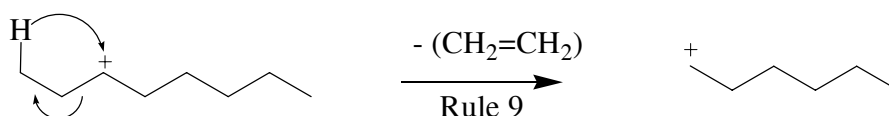
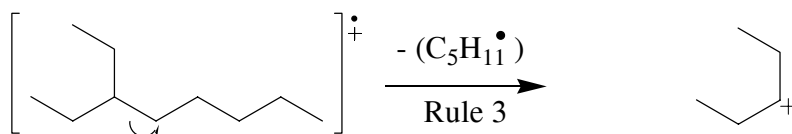
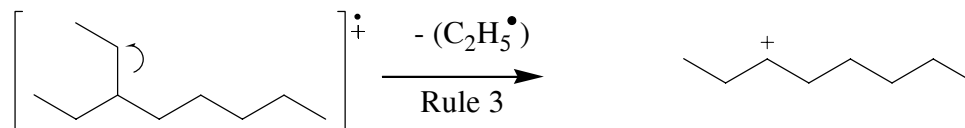
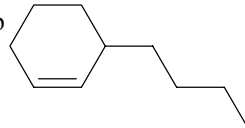
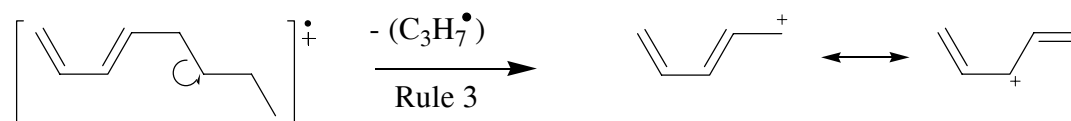
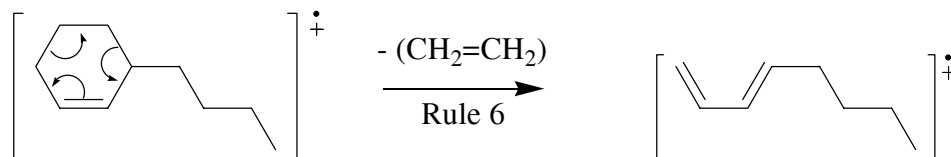
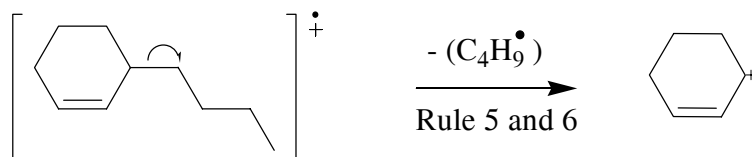
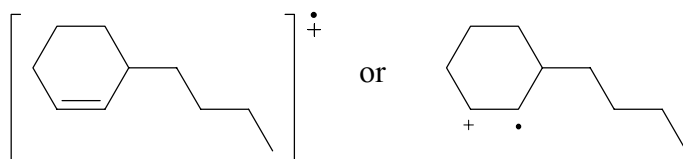
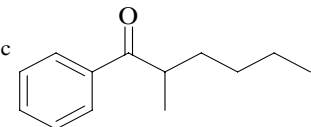
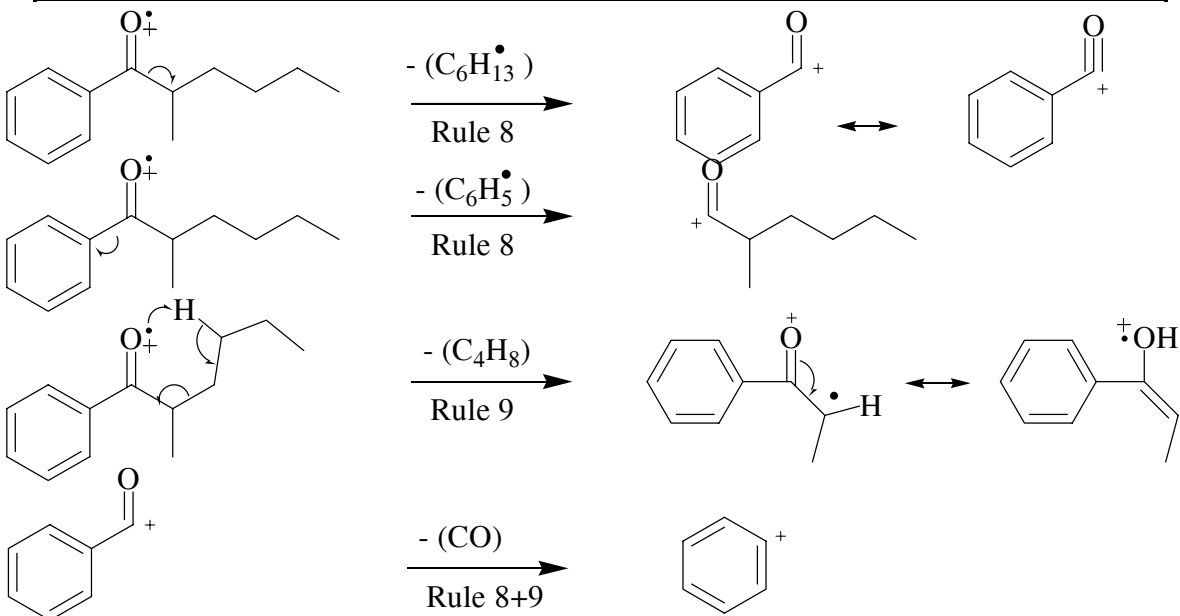
 3-ethyloctane $C_{10}H_{22}$ $C_nH_mX_xN_yO_z$ Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 0	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	22	1.00783	22.17226
	Carbon	10	12.00000	120.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	0	15.9949	0.00000
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
IHD				0
Exact Mass				142.17226

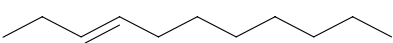


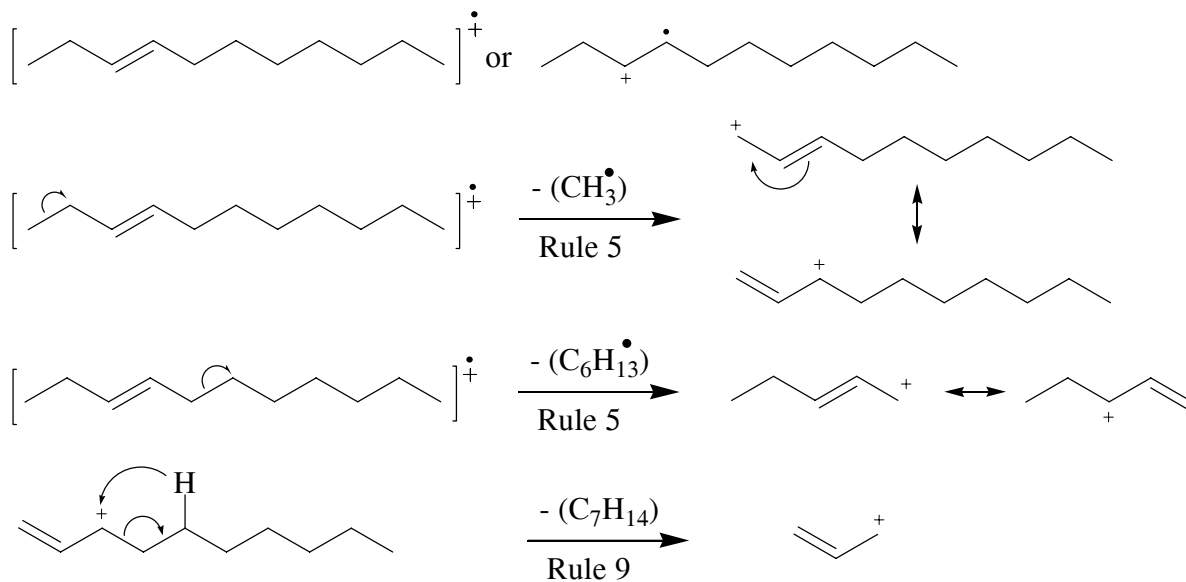
 3-butylcyclohex-1-ene $C_{10}H_{18}$ $C_nH_mX_xN_yO_z$ Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 2	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	18	1.00783	18.14094
	Carbon	10	12.00000	120.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	0	15.9949	0.00000
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
IHD				2
Exact Mass				138.14094

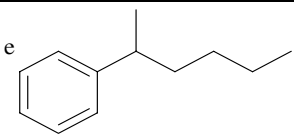


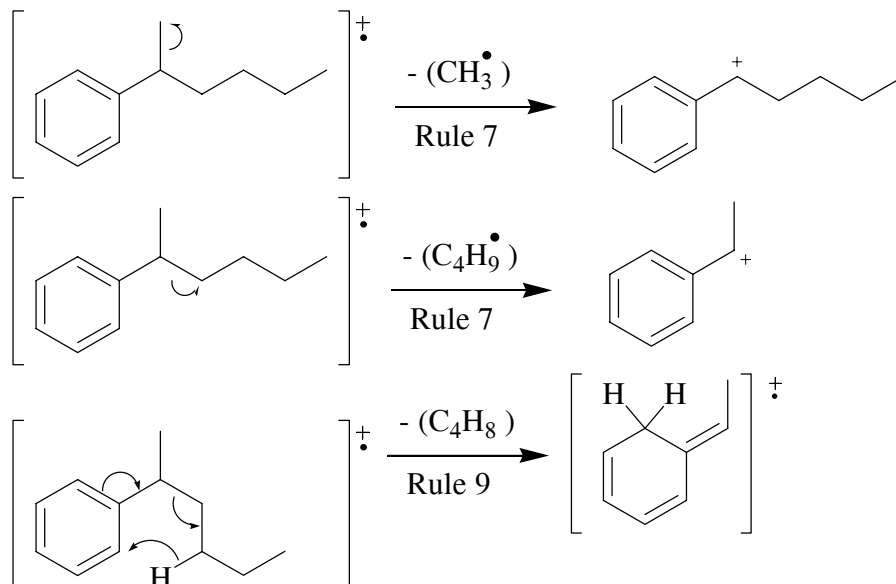
 2-methyl-1-phenylhexan-1-one C₁₃H₁₈O C_nH_mX_xN_yO_z IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 5	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	18	1.00783	18.14094
	Carbon	13	12.00000	156.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				190.13584

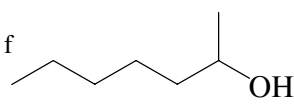


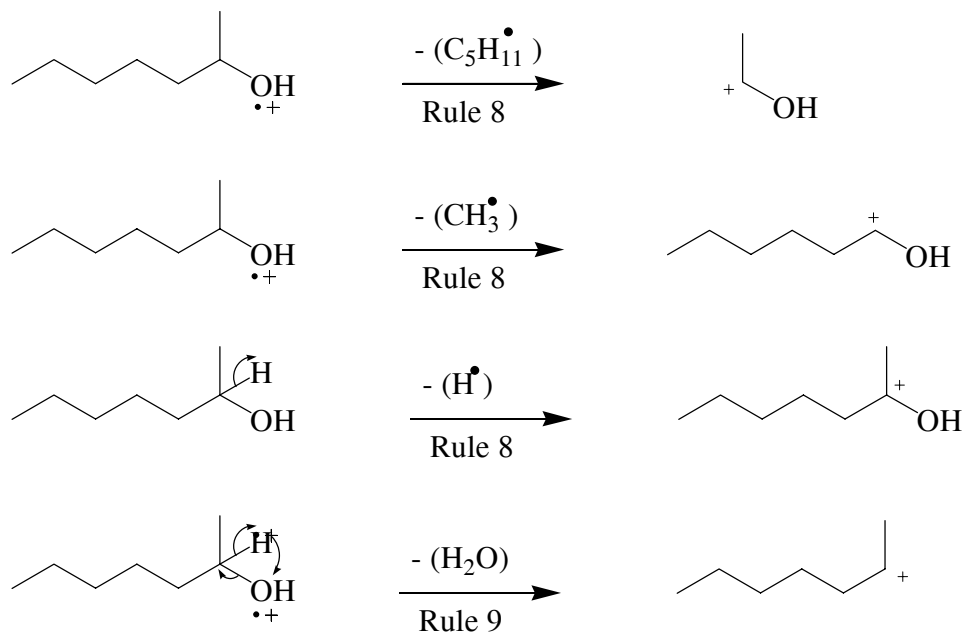
 (E)-undec-3-ene C₁₁H₂₂ C_nH_mX_xN_yO_z IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 1	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	22	1.00783	22.17226
	Carbon	11	12.00000	132.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	0	15.9949	0.00000
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				154.17226

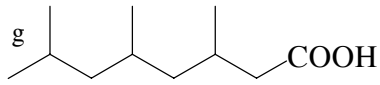


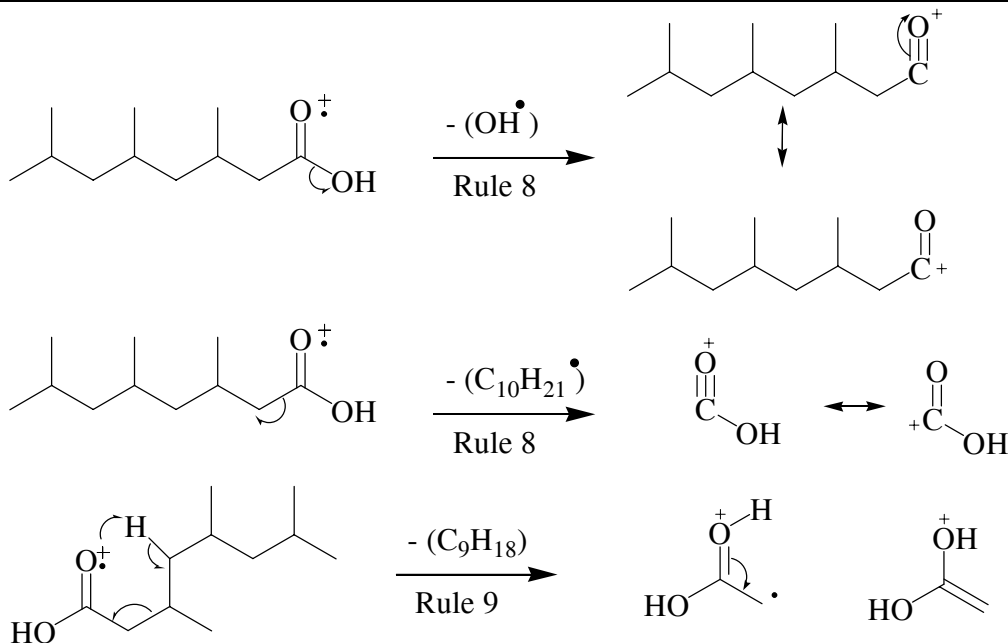
 1-(hexan-2-yl)benzene C₁₂H₁₈ C_nH_mX_xN_yO_z IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 4	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	18	1.00783	18.14094
	Carbon	12	12.00000	144.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	0	15.9949	0.00000
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				162.14094

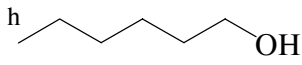


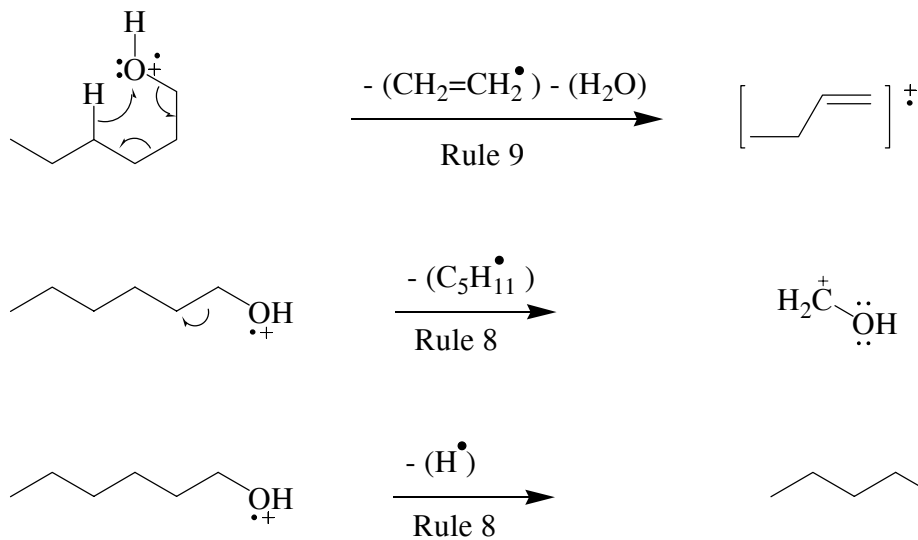
 heptan-2-ol C₇H₁₆O C_nH_mX_xN_yO_z IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 0	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	16	1.00783	16.12528
	Carbon	7	12.00000	84.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				116.12018

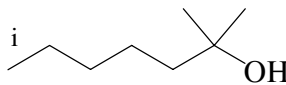


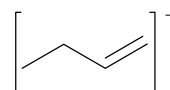
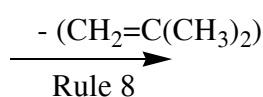
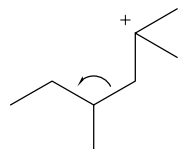
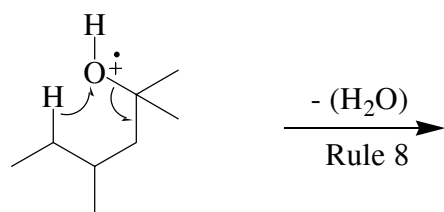
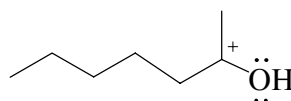
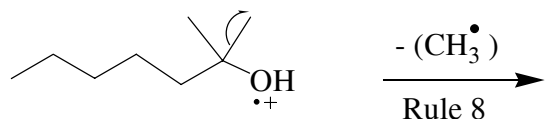
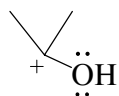
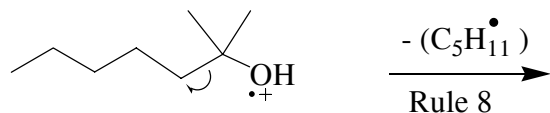
 3,5,7-trimethyloctanoic acid $C_{11}H_{22}O_2$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 1	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	22	1.00783	22.17226
	Carbon	11	12.00000	132.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	2	15.9949	31.98980
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				186.16206

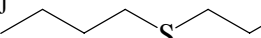


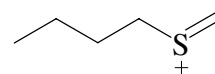
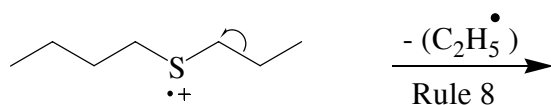
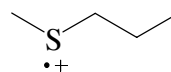
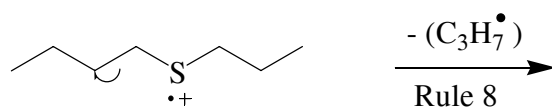
 hexan-1-ol $C_6H_{14}O$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 0	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	14	1.00783	14.10962
	Carbon	6	12.00000	72.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				102.10452

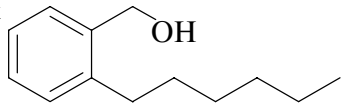


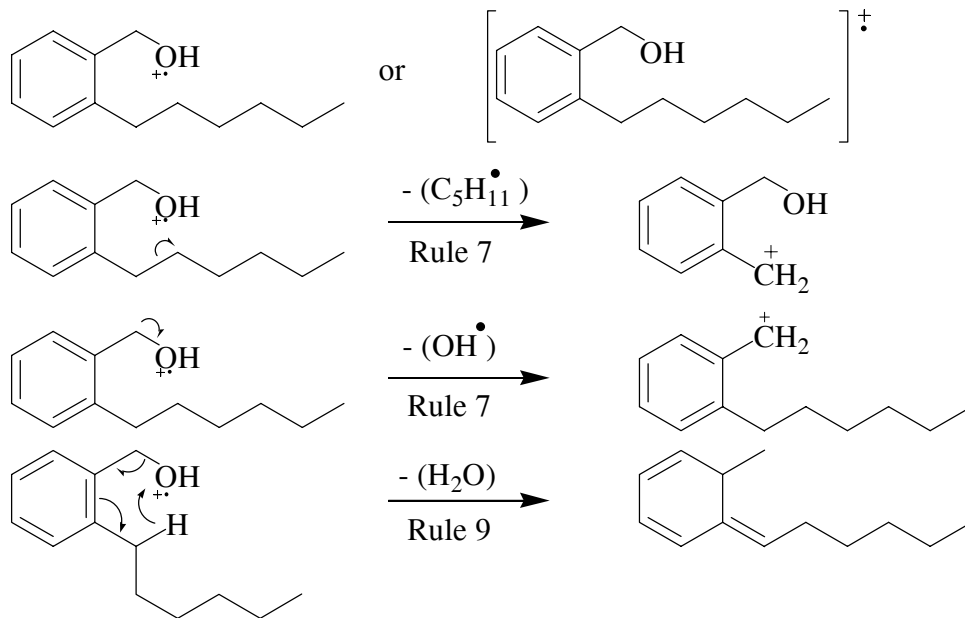
i  2-methylheptan-2-ol C₈H₁₈O C_nH_mX_xN_yO_z Index = (n) - (m/2) - (x/2) + (y/2) + 1 = <tr><td rowspan="7">IHD</td><td>0</td></tr> <tr><td colspan="3">Exact Mass</td></tr> <tr><td colspan="3">130.13584</td></tr> <tr><td>Atom Type</td><td># of Atoms</td><td>Mass</td><td>Total Mass</td></tr> <tr><td>Hydrogen</td><td>18</td><td>1.00783</td><td>18.14094</td></tr> <tr><td>Carbon</td><td>8</td><td>12.00000</td><td>96.00000</td></tr> <tr><td>Nitrogen</td><td>0</td><td>14.0031</td><td>0.00000</td></tr> <tr><td>Oxygen</td><td>1</td><td>15.9949</td><td>15.99490</td></tr> <tr><td>Sulfur</td><td>0</td><td>31.9721</td><td>0.00000</td></tr> <tr><td>Bromine</td><td>0</td><td>78.9183</td><td>0.00000</td></tr>	IHD	0	Exact Mass			130.13584			Atom Type	# of Atoms	Mass	Total Mass	Hydrogen	18	1.00783	18.14094	Carbon	8	12.00000	96.00000	Nitrogen	0	14.0031	0.00000	Oxygen	1	15.9949	15.99490	Sulfur	0	31.9721	0.00000	Bromine	0	78.9183	0.00000
		IHD	0																																	
			Exact Mass																																	
			130.13584																																	
			Atom Type	# of Atoms	Mass	Total Mass																														
			Hydrogen	18	1.00783	18.14094																														
			Carbon	8	12.00000	96.00000																														
	Nitrogen		0	14.0031	0.00000																															
Oxygen	1	15.9949	15.99490																																	
Sulfur	0	31.9721	0.00000																																	
Bromine	0	78.9183	0.00000																																	

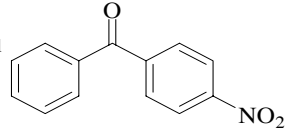


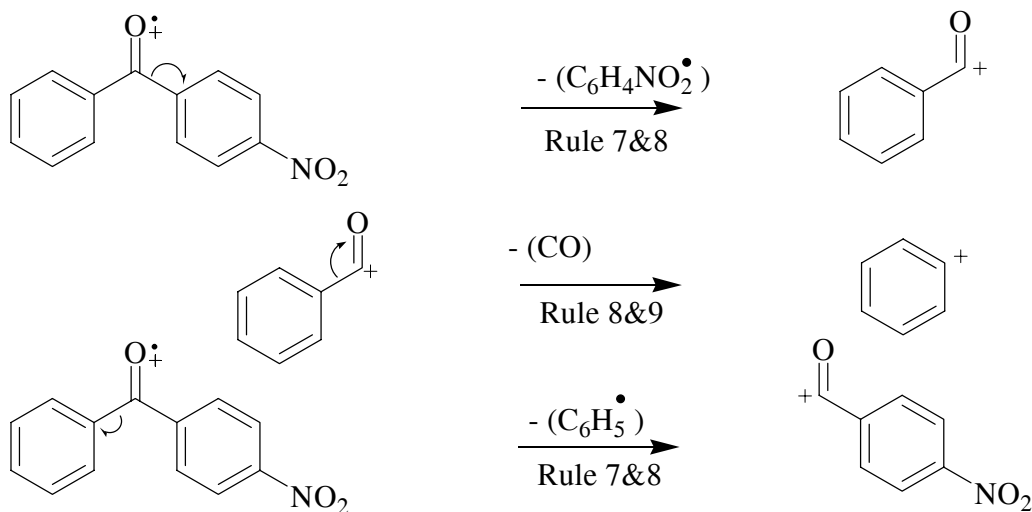
j  butyl(propyl)sulfane C₇H₁₆S C_nH_mX_xN_yO_z Index = (n) - (m/2) - (x/2) + (y/2) + 1 =		Atom Type	# of Atoms	Mass	Total Mass
		Hydrogen	16	1.00783	16.12528
		Carbon	7	12.00000	84.00000
		Nitrogen	0	14.0031	0.00000
		Oxygen	0	15.9949	0.00000
		Sulfur	1	31.9721	31.97210
		Bromine	0	78.9183	0.00000
			Exact Mass		

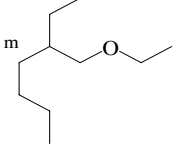


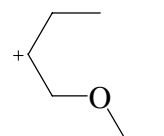
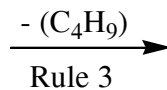
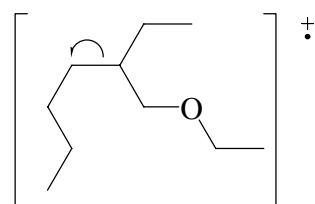
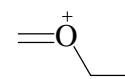
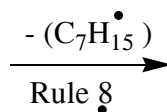
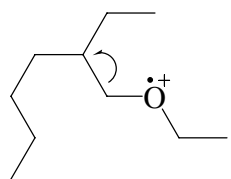
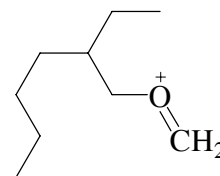
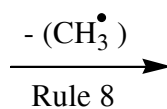
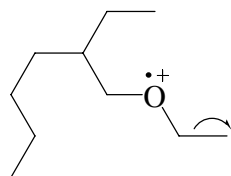
k  (2-hexylphenyl)methanol $C_{13}H_{20}O$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 4	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	20	1.00783	20.15660
	Carbon	13	12.00000	156.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				192.15150

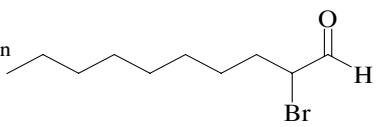


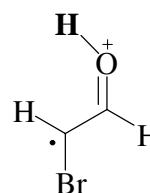
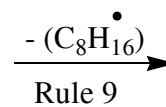
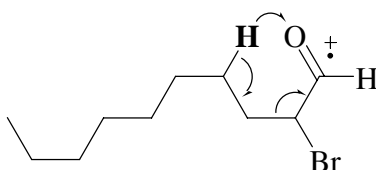
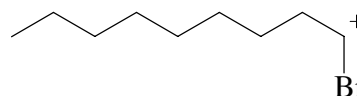
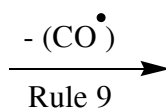
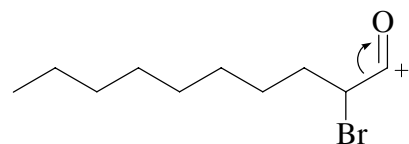
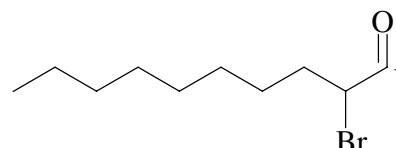
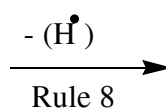
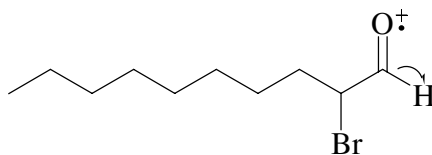
l  (4-nitrophenyl)(phenyl)methanone $C_{13}H_9NO_3$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 10	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	9	1.00783	9.07047
	Carbon	13	12.00000	156.00000
	Nitrogen	1	14.0031	14.00310
	Oxygen	3	15.9949	47.98470
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				227.05827



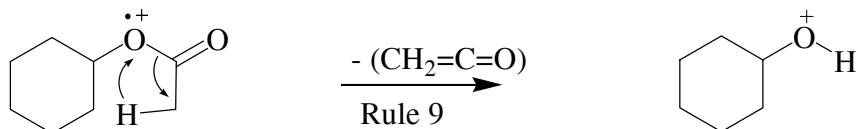
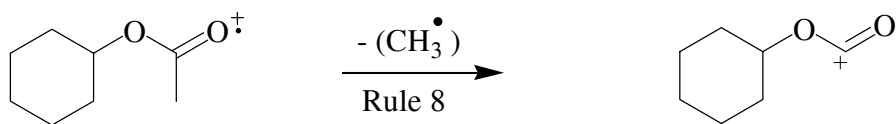
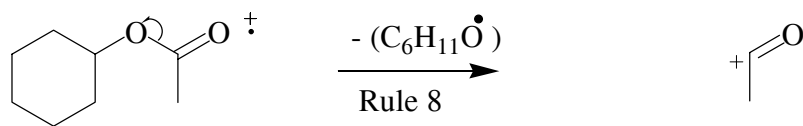
 3-(ethoxymethyl)heptane $C_{10}H_{22}O$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 0	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	22	1.00783	22.17226
	Carbon	10	12.00000	120.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	0	78.9183	0.00000
Exact Mass				158.16716

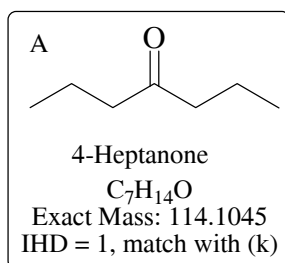


 2-bromodecanal $C_{10}H_{19}BrO$ $C_nH_mX_xN_yO_z$ IHD Index = (n) - (m/2) - (x/2) + (y/2) + 1 = 1	Atom Type	# of Atoms	Mass	Total Mass
	Hydrogen	19	1.00783	19.14877
	Carbon	10	12.00000	120.00000
	Nitrogen	0	14.0031	0.00000
	Oxygen	1	15.9949	15.99490
	Sulfur	0	31.9721	0.00000
	Bromine	1	78.9183	78.91830
Exact Mass				234.06197

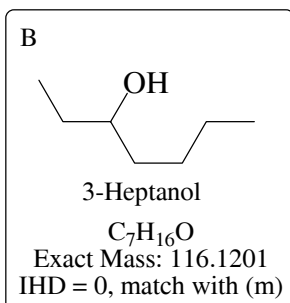


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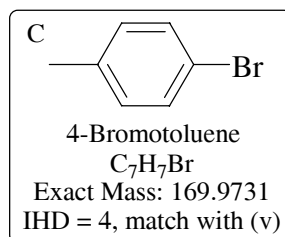




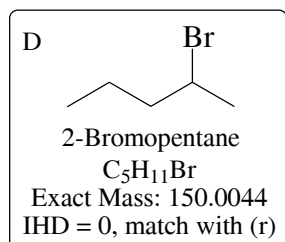
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
71	114	99 / $C_6H_{11}O$	15 / CH_3	
		86 / C_5H_{10}	28 / C_2H_4	R
		71 / C_4H_7O	43 / C_3H_7	
		58 / C_3H_5O	56 / C_4H_8	R
		43 / C_3H_7	71 / C_4H_7O	



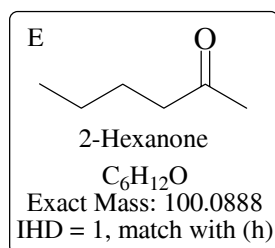
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
59	116 by CI	115 / $C_7H_{15}O$	1 / H	
		98 / C_7H_{14}	18 / H_2O	R
		87 / $C_5H_{11}O$	29 / C_2H_5	
		69 / C_5H_9	18 / H_2O , 29 / C_2H_5	R
		59 / C_3H_7O	57 / C_4H_9	
		45 / C_2H_5O	71 / C_5H_{11}	
		43 / C_3H_7	73 / C_4H_9O	
		41 / C_4H_5	18 / H_2O , 57 / C_4H_9	R



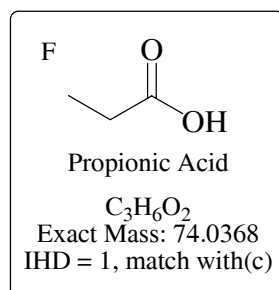
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
91	170	91 / C_7H_7	79 / Br	Tropylium Ion
		75 / C_6H_3	80 / HBr , 16 / CH_4	R
		65 / C_5H_5	79 / Br , 26 / C_2H_2	R
		50 / C_4H_2	120 / C_7H_5Br	
		39 / C_3H_2	131 / C_4H_5Br	



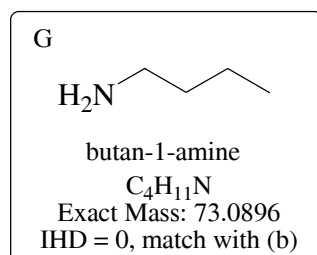
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
71	150	121 / C_3H_6Br	29 / C_2H_5	
		107 / C_2H_4Br	43 / C_3H_7	
		71 / C_5H_{11}	79 / Br	
		55 / C_4H_7	80 / HBr , 16 / CH_4	R
		43 / C_3H_7	C_2H_4Br	



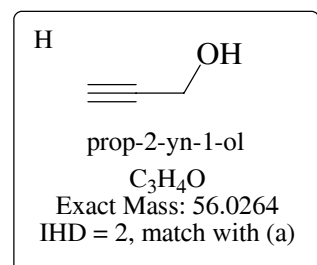
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
43	100	85 / C_5H_9O	15 / CH_3	
		71 / C_4H_7O	29 / C_2H_5	
		58 / C_4H_{10}	42 / C_2H_2O	R
		57 / C_3H_5O	43 / C_3H_7	
		43 / C_3H_7	57 / C_3H_5O	



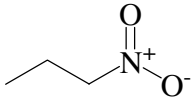
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
74	74	73 / $C_3H_5O_2$	1 / H	
		57 / C_3H_5O	17 / OH	
		56 / C_3H_4O	18 / H_2O	R
		45 / CHO_2	29 / C_2H_5	

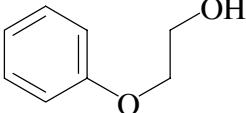


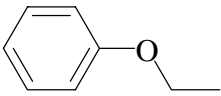
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
73	73	56 / C_4H_8	17 / NH_3	R
		55 / C_4H_7	18 / NH_4	R
		44 / C_2H_6N	29 / C_2H_5	
		43 / C_3H_7	30 / CH_4N	

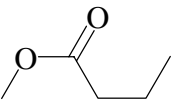


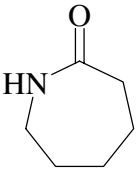
Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
55	56 by CI	55 / C_3H_3O	1 / H	
		39 / C_3H_3	17 / OH	
		38 / C_3H_2	18 / H_2O	

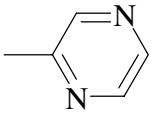
I	Base Peak	Molecular Ion	Fragmentation		
			Fragment Ion	Fragment Loss	Rearrangement
 1-Nitropropane $C_3H_7NO_2$ Exact Mass: 89.0477 IHD = 1, match with (d)	43	89 by CI	90 / $C_3H_8NO_2$	Addition of H	
			72 / C_3H_6NO	17 / OH	R
			43 / C_3H_7	46 / NO_2	
			42 / C_3H_6	47 / HNO_2	R

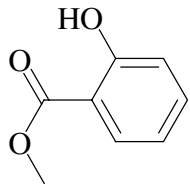
J	Base Peak	Molecular Ion	Fragmentation		
			Fragment Ion	Fragment Loss	Rearrangement
 2-Phenoxyethanol $C_8H_{10}O_2$ Exact Mass: 138.0681 IHD = 4, match with (q)	94	138	107 / C_7H_7O	31 / CH_3O	
			94 / C_6H_5O	44 / C_2H_4O	R
			77 / C_6H_5	61 / $C_2H_5O_2$	
			66 / C_5H_6	72 / $C_3H_5O_2$	R
			51 / C_4H_3	87 / $C_4H_7O_2$	
			39 / C_3H_2	99 / $C_5H_8O_2$	

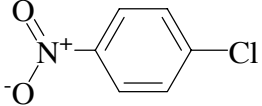
K	Base Peak	Molecular Ion	Fragmentation		
			Fragment Ion	Fragment Loss	Rearrangement
 Phenetole $C_8H_{10}O$ Exact Mass: 122.0732 IHD = 4, match with (o)	94	122	94 / C_6H_5O	28 / C_2H_4	R
			77 / C_6H_5	45 / C_2H_5O	
			66 / C_5H_6	56 / C_3H_4O	
			51 / C_4H_3	71 / C_4H_7O	
			39 / C_3H_2	83 / C_5H_8O	

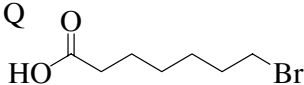
L	Base Peak	Molecular Ion	Fragmentation		
			Fragment Ion	Fragment Loss	Rearrangement
 Methyl Butyrate $C_5H_{10}O_2$ Exact Mass: 102.0681 IHD = 1, match with (i)	43	102	87 / $C_4H_7O_2$	15 / CH_3	
			74 / $C_3H_5O_2$	28 / C_2H_4	R
			71 / C_4H_7O	31 / CH_3O	
			59 / $C_2H_3O_2$	43 / C_3H_7	
			43 / C_3H_7	59 / $C_2H_3O_2$	

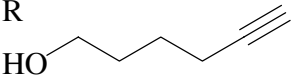
M	Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
 Caprolactam C₆H₁₁NO Exact Mass: 113.0841 IHD = 2, match with (j)	113	113	85 / C ₅ H ₁₁ N	28 / CO	R
			84 / C ₅ H ₁₀ N	29 / CHO	
			56 / C ₄ H ₈	57 / C ₂ H ₃ NO	
			55 / C ₄ H ₇	58 / C ₂ H ₄ NO	
			42 / C ₃ H ₆	71 / C ₃ H ₅ NO	R

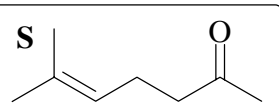
N	Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
 2-methylpyrazine C₅H₆N₂ Exact Mass: 94.0531 IHD = 4, match with (e)	94	94	67 / C ₄ H ₅ N	27 / CHN	
			53 / C ₃ H ₃ N	41 / C ₂ H ₃ N	
			42 / C ₂ H ₄ N	52 / C ₃ H ₂ N	
			41 / C ₂ H ₃ N	53 / C ₃ H ₃ N	
			40 / C ₂ H ₂ N	54 / C ₃ H ₄ N	

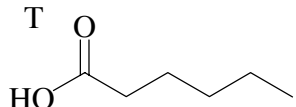
O	Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
 Methyl salicylate C₈H₈O₃ Exact Mass: 152.0473 IHD = 5, match with (s)	152	152	135 / C ₈ H ₇ O ₂	17 / OH	
			122 / C ₇ H ₆ O ₂	30 / CH ₂ O	R
			107 / C ₇ H ₇ O	45 / CHO ₂	R
			105 / C ₇ H ₅ O	17 / OH, 30 / CH ₂ O	R
			92 / C ₆ H ₄ O	60 / C ₂ H ₄ O ₂	R
			77 / C ₆ H ₅	17 / OH, 58 / C ₂ H ₂ O ₂	
			63 / C ₅ H ₃	89 / C ₃ H ₅ O ₃	
			39 / C ₃ H ₂	113 / C ₅ H ₆ O ₃	

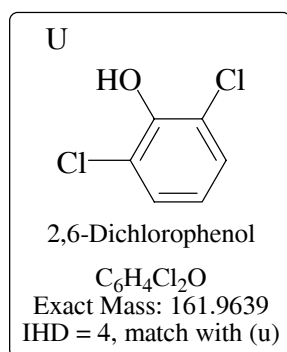
P	Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
 1-Chloro-4-Nitrobenzene C₆H₄ClNO₂ Exact Mass: 156.9931 IHD = 5, match with (t)	75 or 157	157	141 / C ₆ H ₄ ClNO	16 / O	
			127 / C ₆ H ₄ O	30 / NO	R
			111 / C ₆ H ₄ Cl	46 / NO ₂	
			99 / C ₅ H ₄ Cl	58 / CNO ₂	R
			75 / C ₆ H ₃	46 / NO ₂ , 36 / HCl	
			50 / C ₄ H ₂	107 / C ₂ H ₂ ClNO ₂	

Q		Base Peak	Molecular Ion	Fragement Ion	Fragment Loss	Rearrangment
	7-Bromo Heptanoic Acid $C_7H_{13}BrO_2$ Exact Mass: 208.0099 IHD = 1, match with (w)	60	208 by CI	191 / $C_7H_{12}OBr$ 149 / $C_5H_{10}Br$ 129 / $C_7H_{13}O_2$ 111 / $C_7H_{11}O$ 83 / C_6H_{11} 60 / $C_2H_4O_2$	17 / OH 59 / $C_2H_3O_2$ 79 / Br 79 / Br, 18 / H_2O 125 / CH_2BrO_2 147 / C_5H_9Br	 R R R

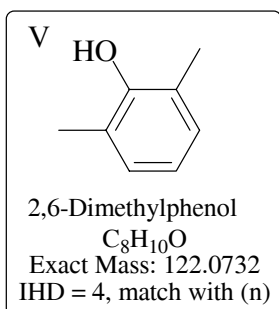
R		Base Peak	Molecular Ion	Fragement Ion	Fragment Loss	Rearrangment
	5-Hexyn-1-ol $C_6H_{10}O$ Exact Mass: 98.0732 IHD = 2, match with (g)	70	98	97 / C_6H_9O 83 / C_5H_7O 79 / C_6H_7 70 / C_4H_6O	1 / H 15 / CH_3 19 / H_3O 28 / C_2H_4	

S		Base Peak	Molecular Ion	Fragement Ion	Fragment Loss	Rearrangment
	6-Methyl-5-hepten-2-one $C_8H_{14}O$ Exact Mass: 126.1045 IHD = 2, match with (p)	43	126	111 / $C_7H_{11}O$ 108 / C_8H_{12} 93 / C_7H_9 83 / C_6H_{11} 69 / C_5H_9 58 / C_3H_6O 55 / C_4H_7 43 / C_2H_3O	15 / CH_3 18 / H_2O 33 / CH_5O 43 / C_2H_3O 57 / C_3H_5O 68 / C_5H_8 71 / C_4H_7O 83 / C_6H_{11}	 R R R

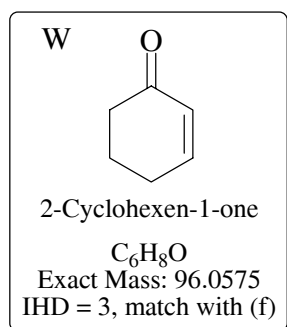
T		Base Peak	Molecular Ion	Fragement Ion	Fragment Loss	Rearrangment
	Hexanoic acid $C_6H_{12}O_2$ Exact Mass: 116.0837 IHD = 1, match with (l)	60	116 by CI	87 / $C_4H_7O_2$ 73 / $C_3H_5O_2$ 60 / $C_2H_4O_2$ 45 / CHO_2	29 / C_2H_5 43 / C_3H_7 56 / C_4H_8 71 / C_5H_{11}	 R



Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
162	162	126 / C_6H_3OCl	36 / HCl	R
		98 / C_5H_3Cl	64 / $CHOCl$	R
		63 / C_5H_3	99 / $CHOCl_2$	



Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
122	122	121 / C_8H_9O	1 / H	
		107 / C_7H_7O	15 / CH_3	
		91 / C_7H_7	31 / CH_3O	
		77 / C_6H_5	45 / C_2H_5O	
		65 / C_5H_5	57 / C_3H_5O	



Base Peak	Molecular Ion	Fragment Ion	Fragment Loss	Rearrangement
68	96	68 / C_4H_4O	28 / C_2H_4	R
		55 / C_3H_3O	41 / C_3H_5	
		53 / C_4H_5	43 / C_2H_3O	
		42 / C_2H_2O	54 / C_4H_6	R