

ХРОМАТО-МАСС-СПЕКТРОМЕТРИЧЕСКИЙ АНАЛИЗ

Средство измерений:

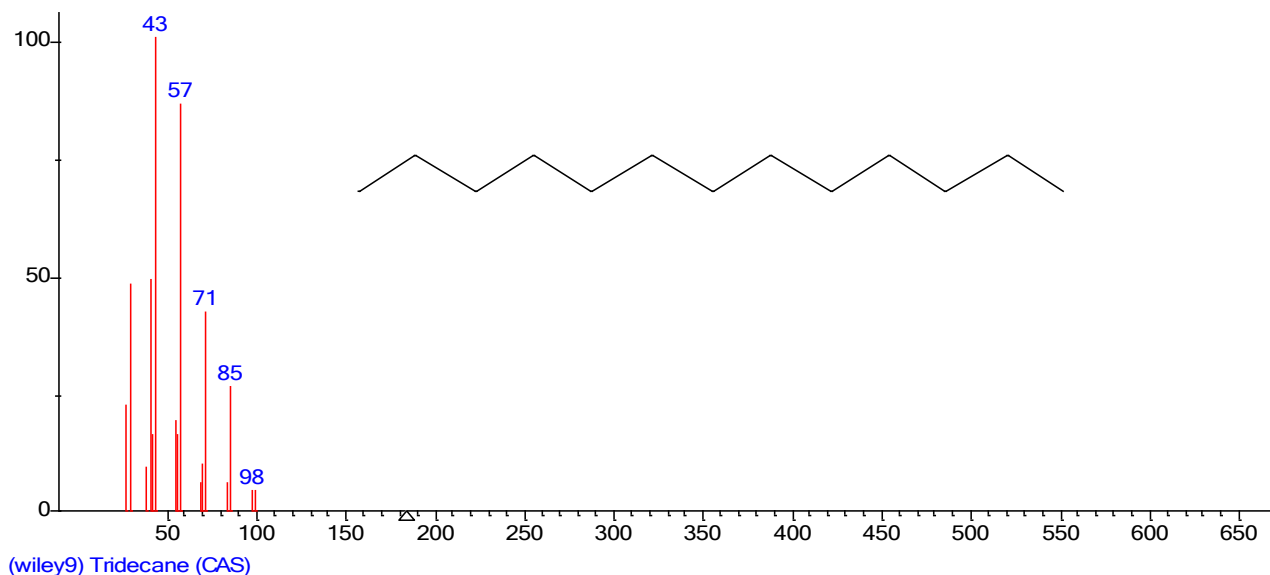
Комплекс аппаратно-программируемый для медицинских исследований на базе хроматографа «Хроматэк-Кристалл 5000.1» с МСД (детектором масс-спектрометрическим) Trace DSQ и программным обеспечением Xcalibur с масс-спектрометрической библиотекой данных органических веществ NIST11 и Wiley9 с кварцевой капиллярной колонкой THERMO TR-5MS (50м-0,25ID-1,0um).

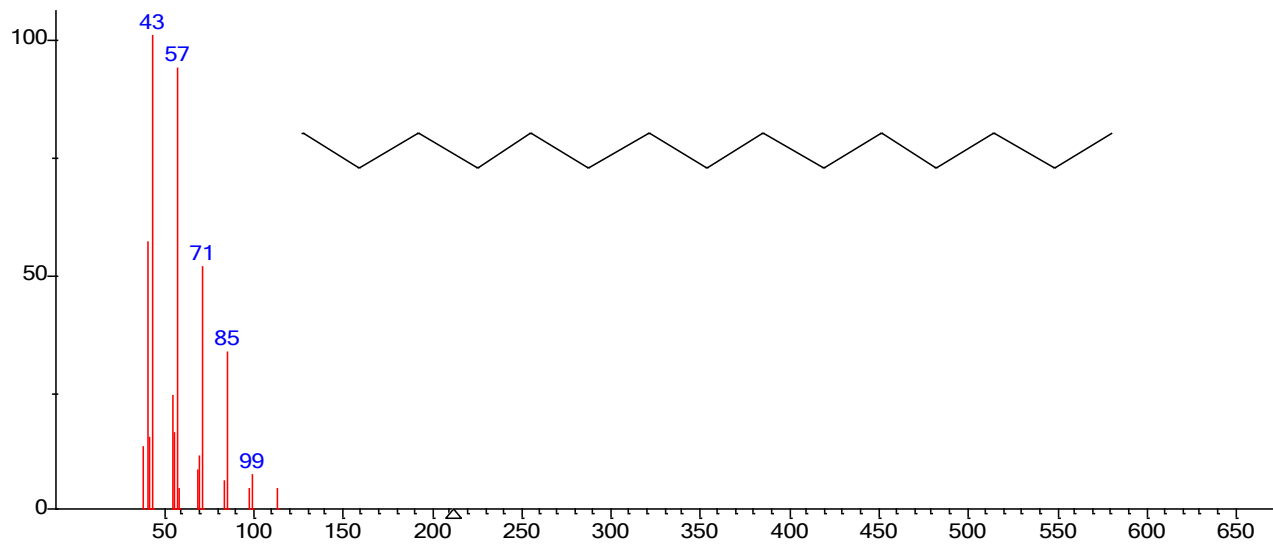
Режим анализа: Время анализа [60 мин]
Термостат: Температура, °C [50 °C, 5 мин, 10 °C/мин, 280 °C]
Колонка: Газ-носитель (Гелий) [0.9 мл/мин, 0 мин]
Сброс потока [0 мл/мин, 1 мин; 30 мл/мин] Деление потока [0]
Испаритель : Температура, °C [280 °C, 0 мин]
МСД: Температура, °C [250 °C, 0 мин]

Detector Gain: 1,00X10⁵ (1100 V)
Fore Pressure (mTorr): 50
Mass range (m/z): 15–650
Ionization Energy (eV): 70.0

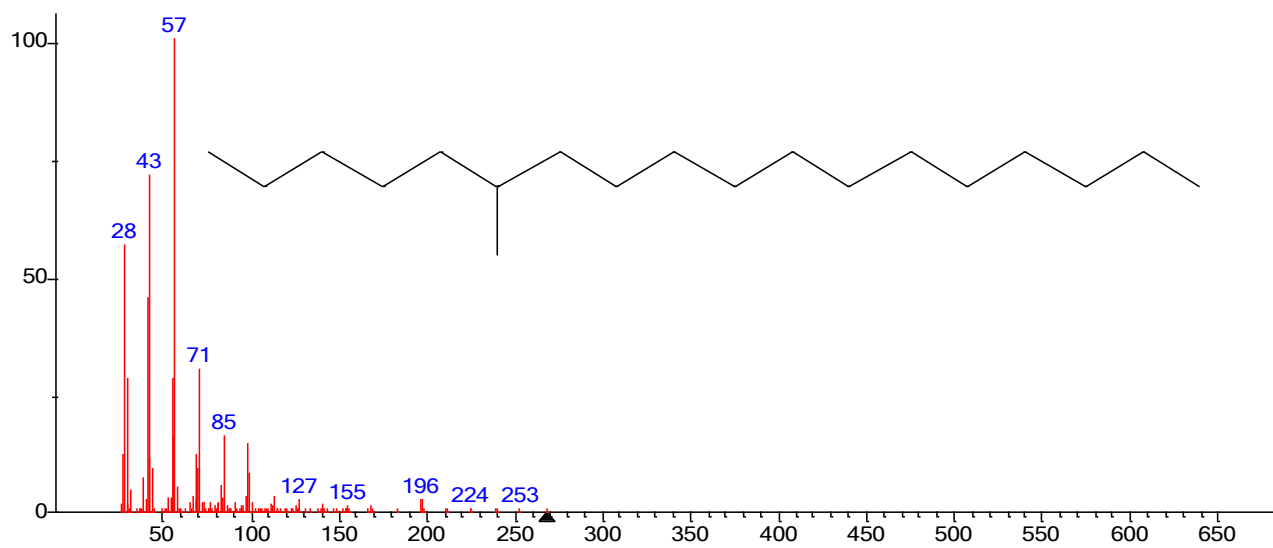
В ходе исследования 15 образцов морской и речной воды, а также 3 образцов замороженной биомассы были обнаружены следующие группы соединений:

1. Компоненты нефтяных фракций:

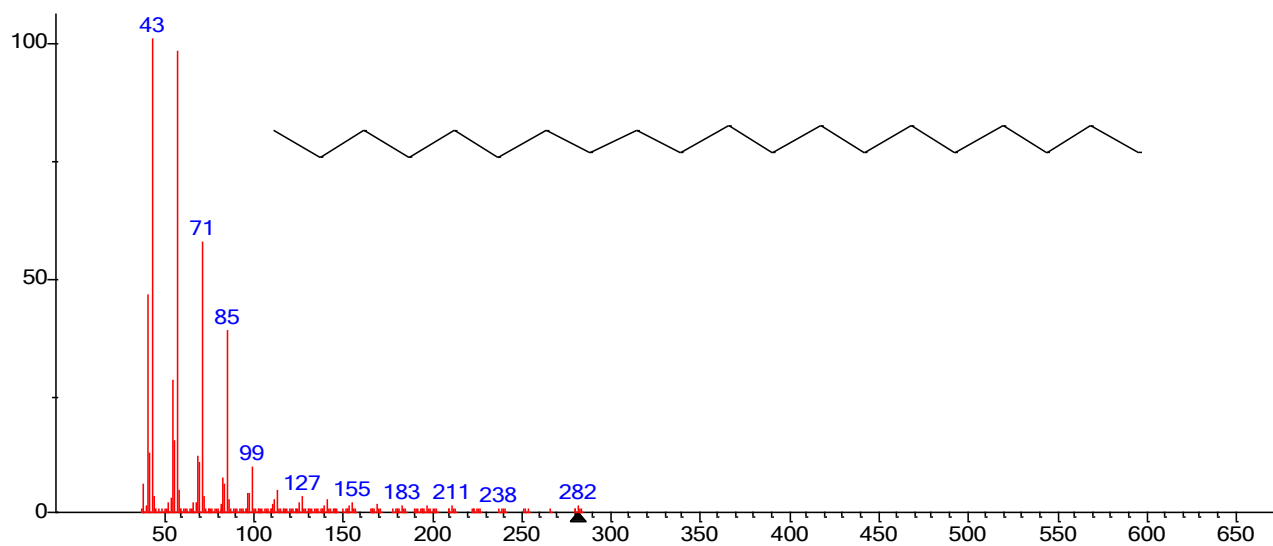




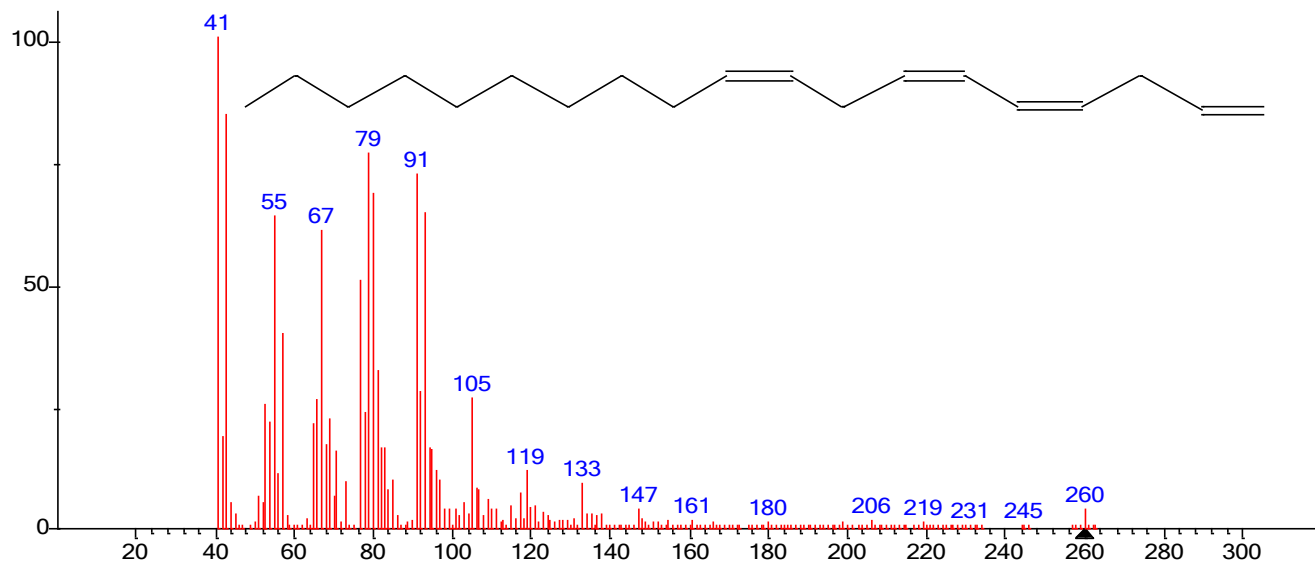
(wiley9) Pentadecane (CAS)



(mainlib) Octadecane, 6-methyl-

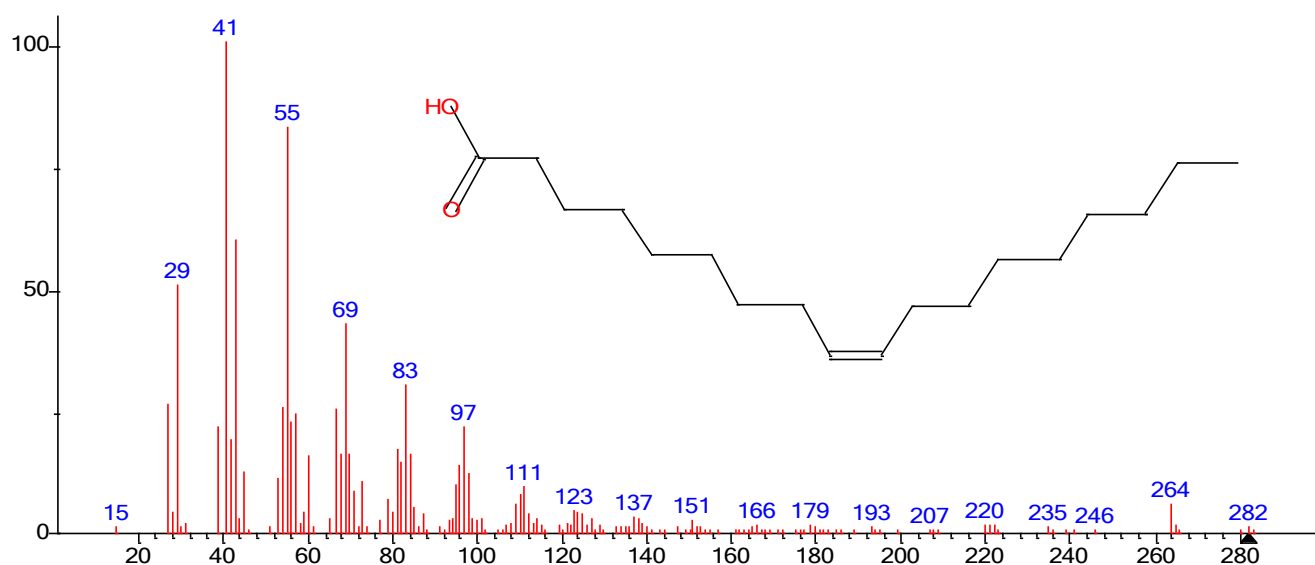


(wiley9) Eicosane (CAS)

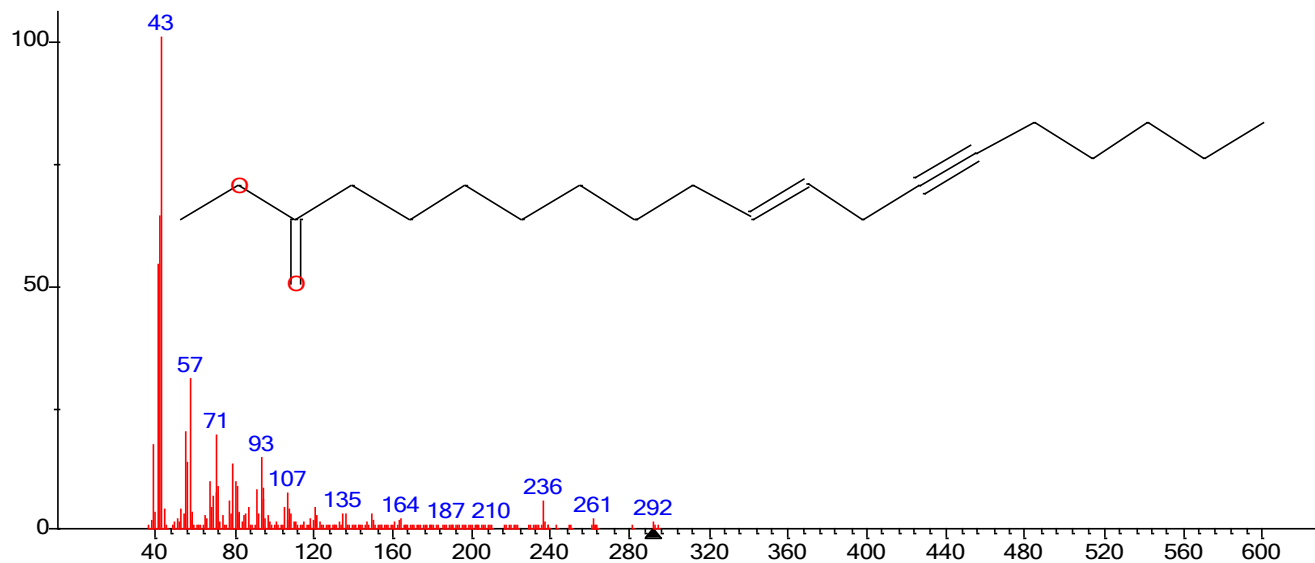


(mainlib) Z,Z,Z-1,4,6,9-Nonadecatetraene

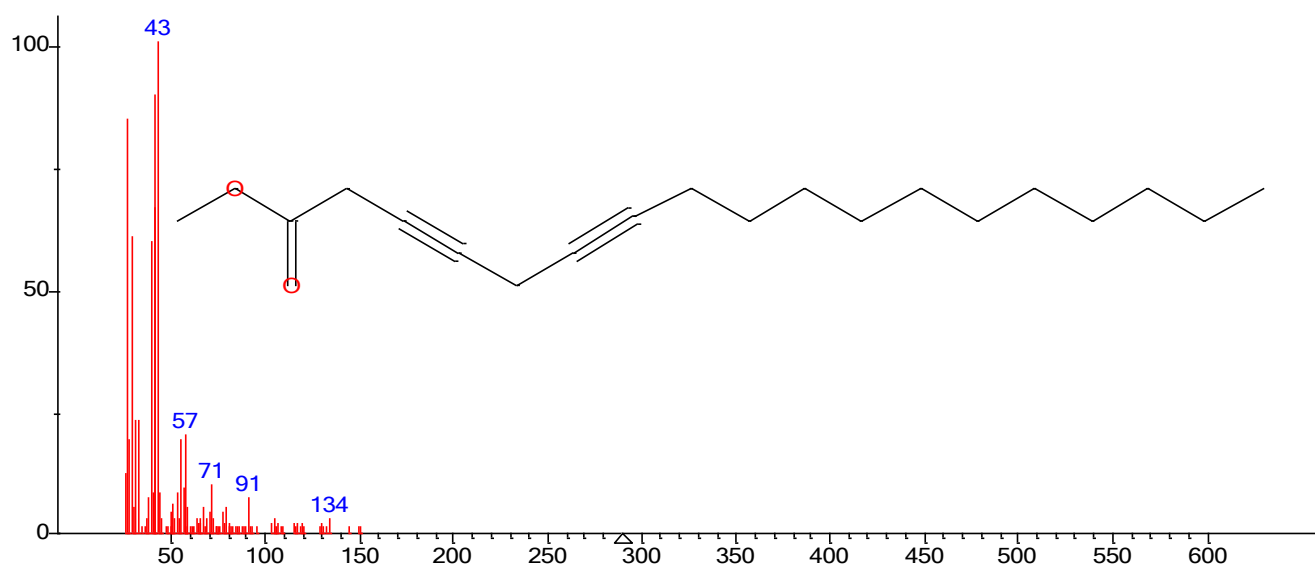
2. Жирные кислоты и эфиры:



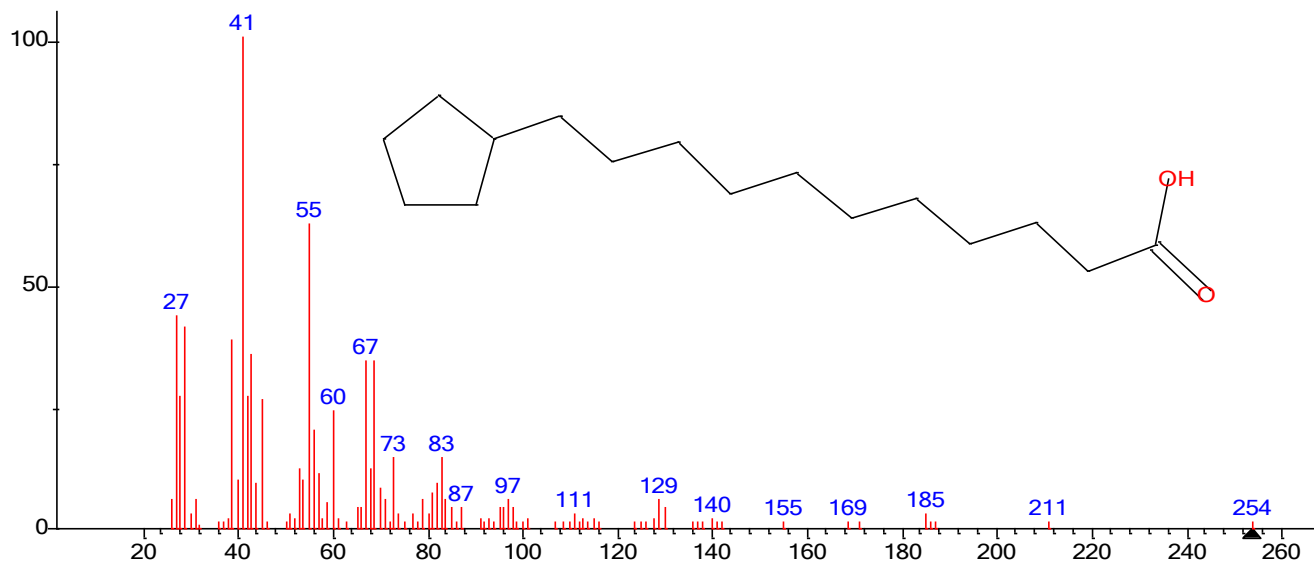
(mainlib) Oleic Acid



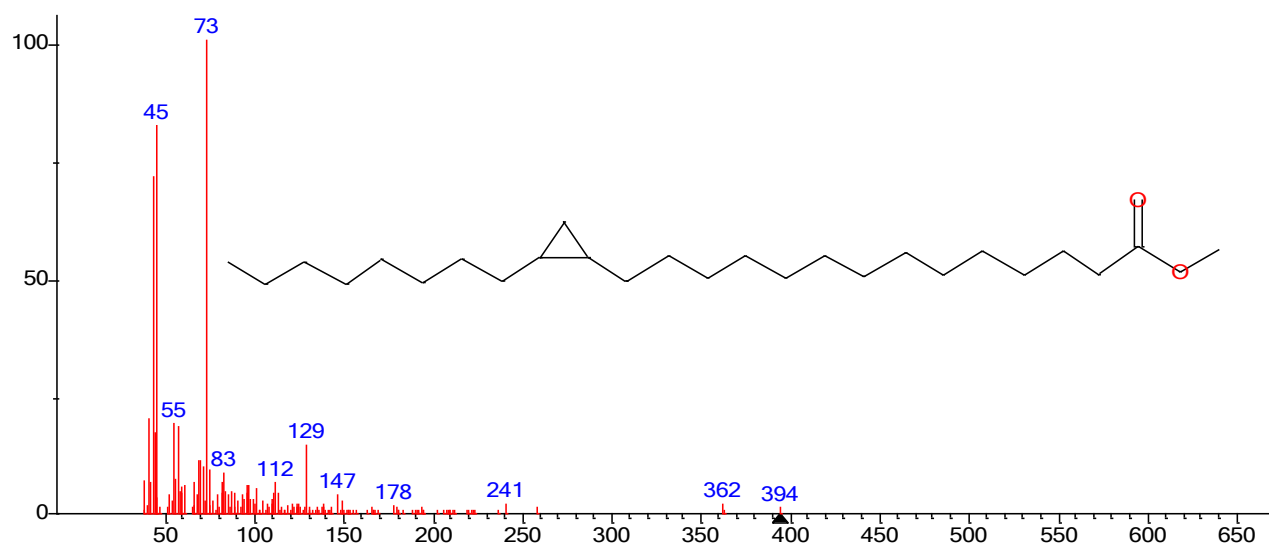
(mainlib) 9-Octadecen-12-ynoic acid, methyl ester



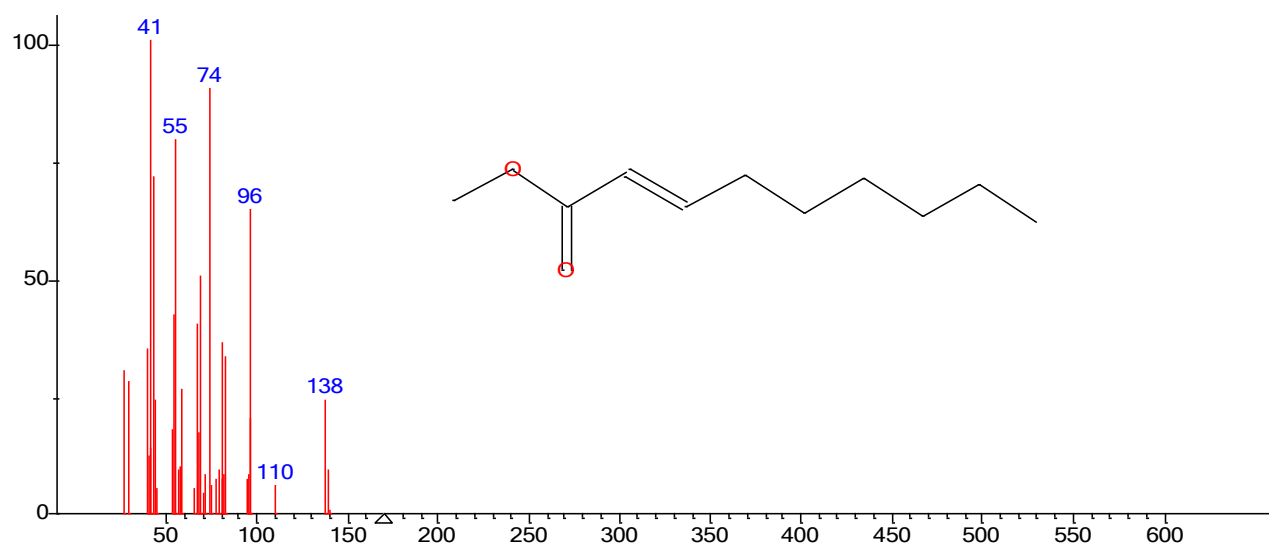
(mainlib) 3,6-Octadecadiynoic acid, methyl ester



(mainlib) Cyclopentaneundecanoic acid

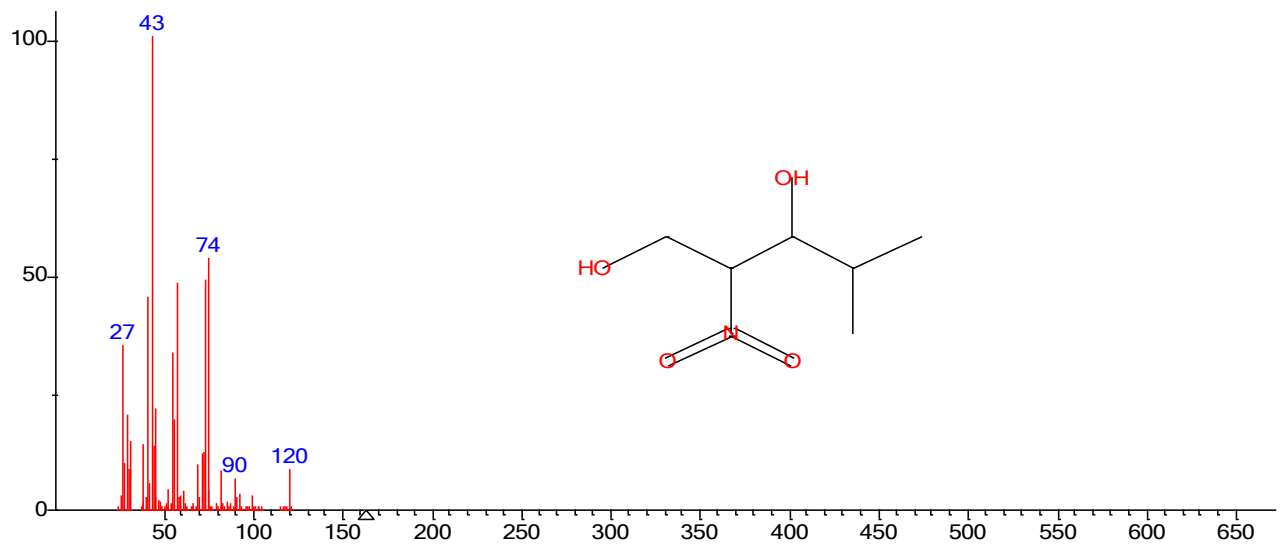


(mainlib) Cyclopropanetetradecanoic acid, 2-octyl-, methyl ester

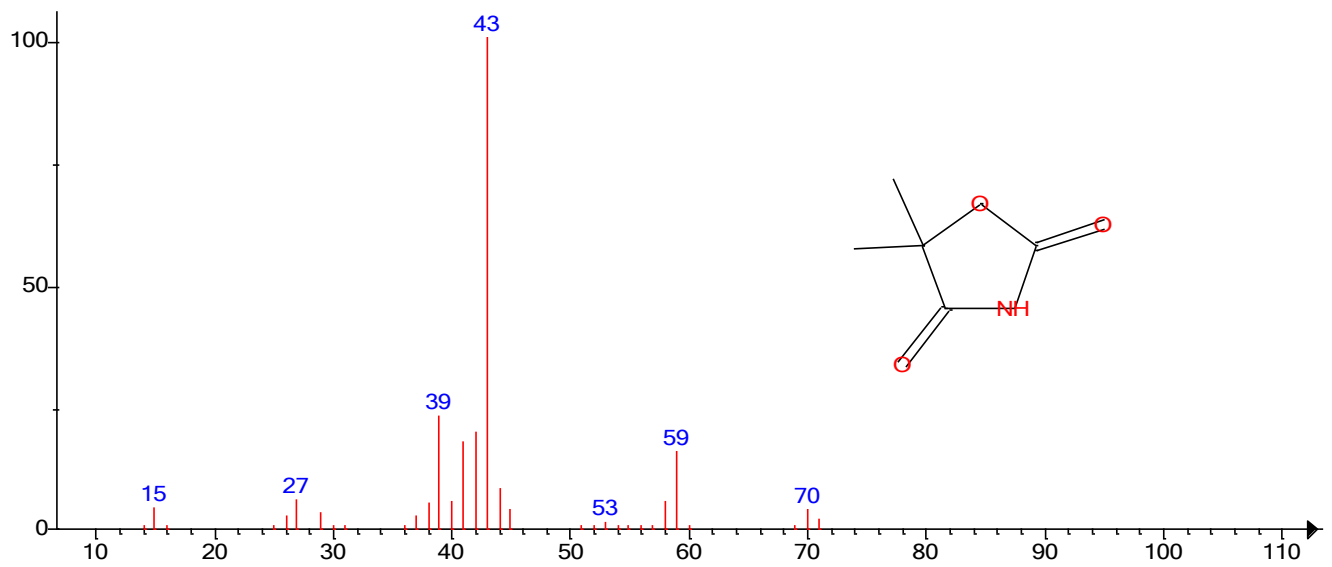


(wiley9) Methyl nonenoate

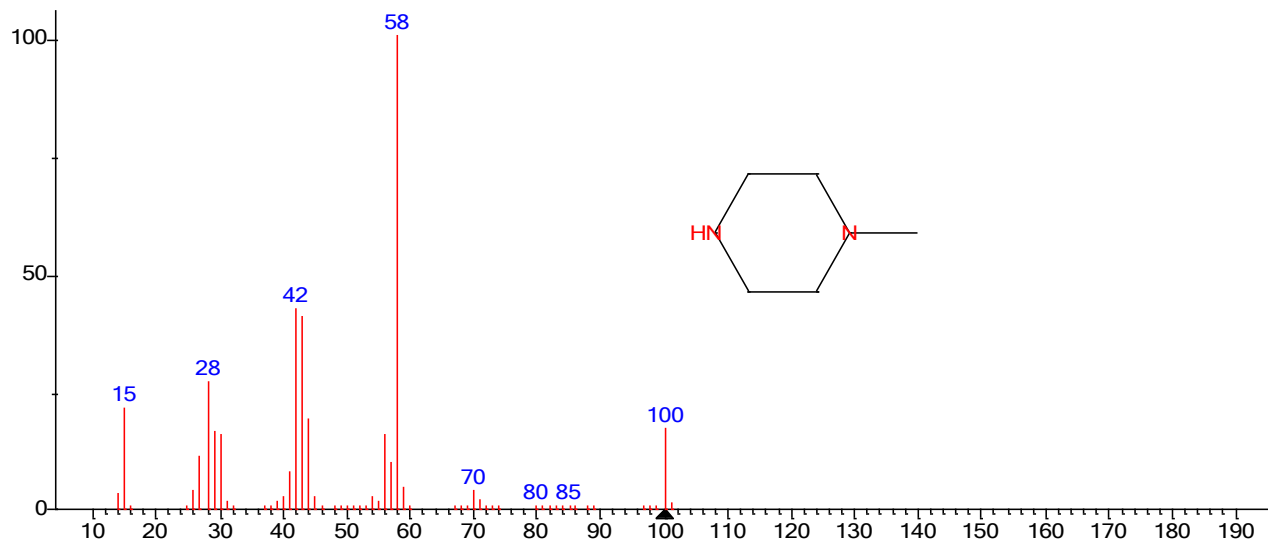
3. Азотсодержащие соединения:



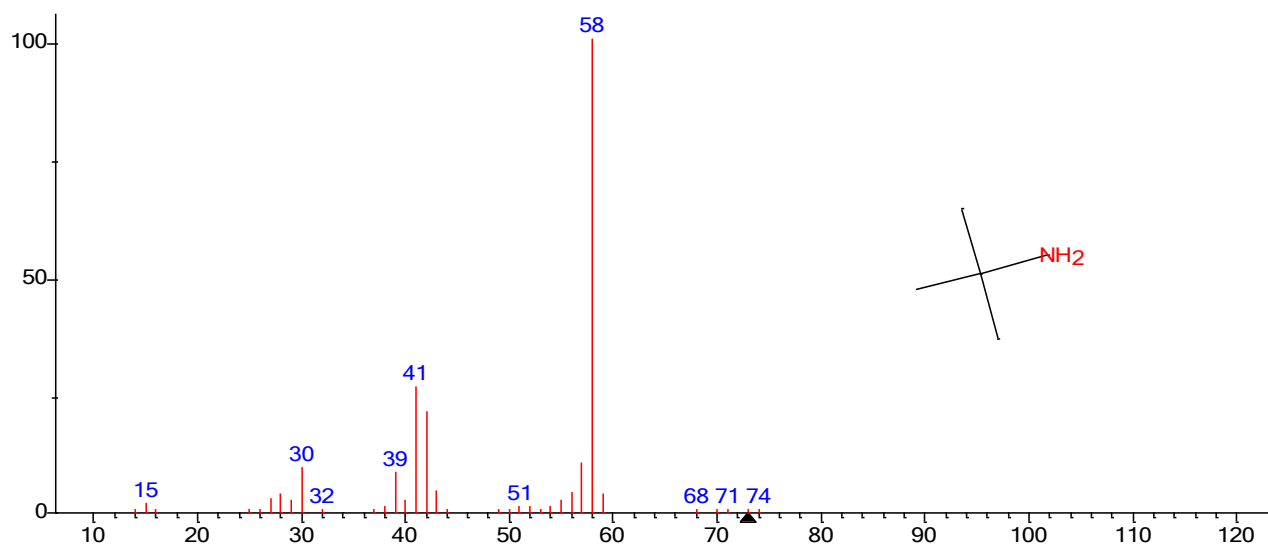
(mainlib) 1,3-Pentandiol, 4-methyl-2-nitro



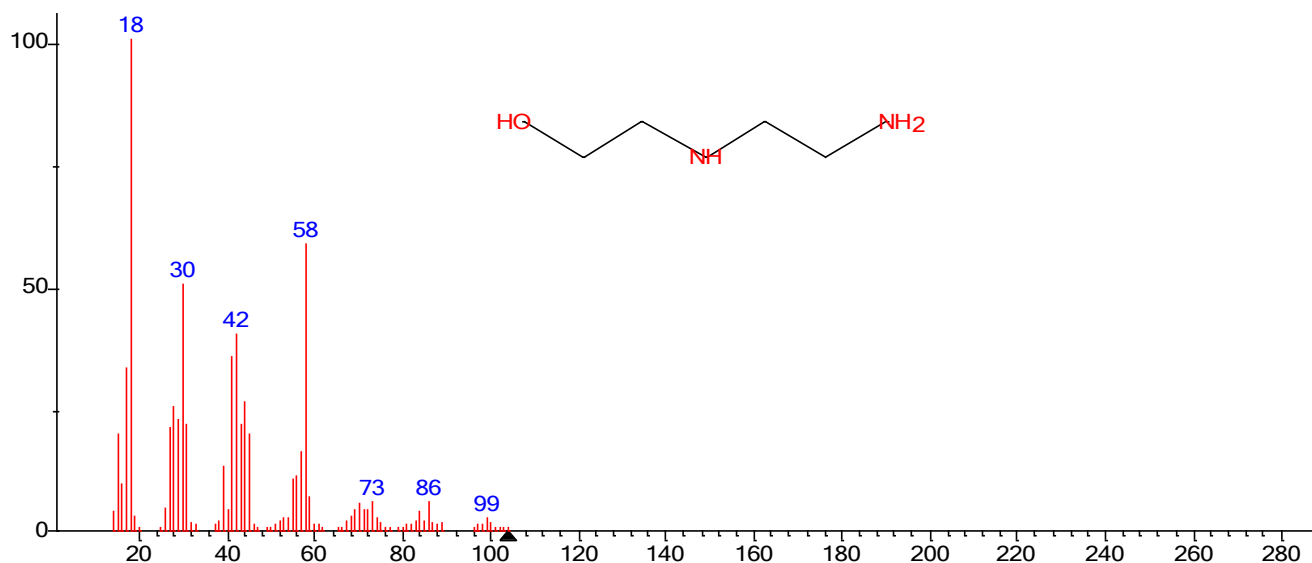
(replib) Dimethadione



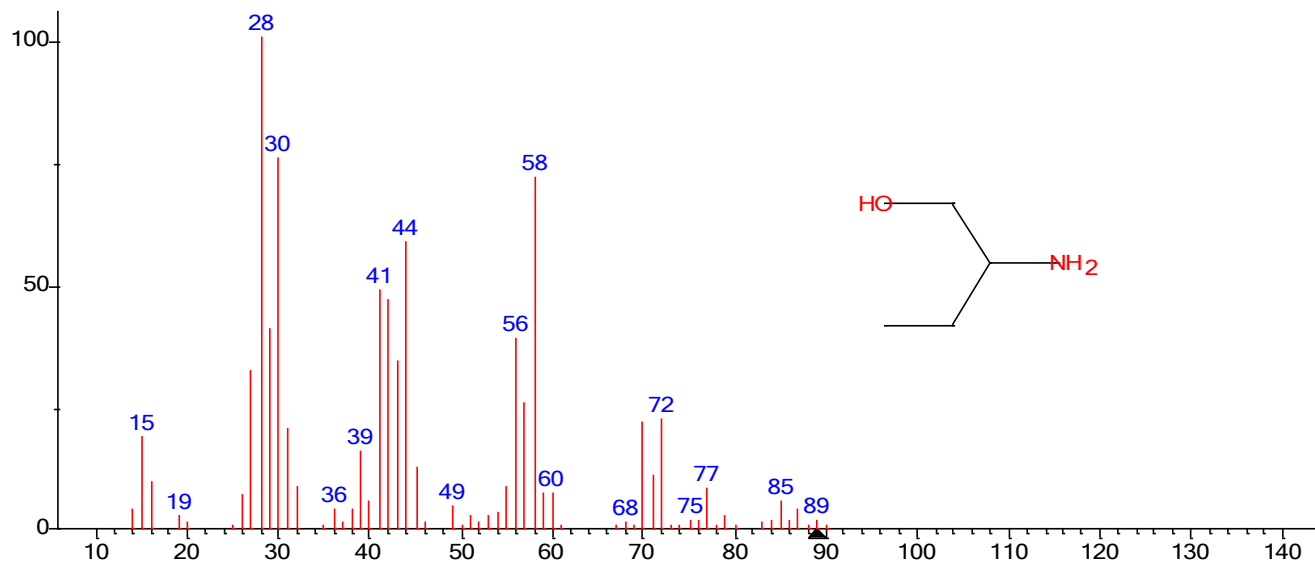
(wiley9) Piperazine, 1-methyl- (CAS)



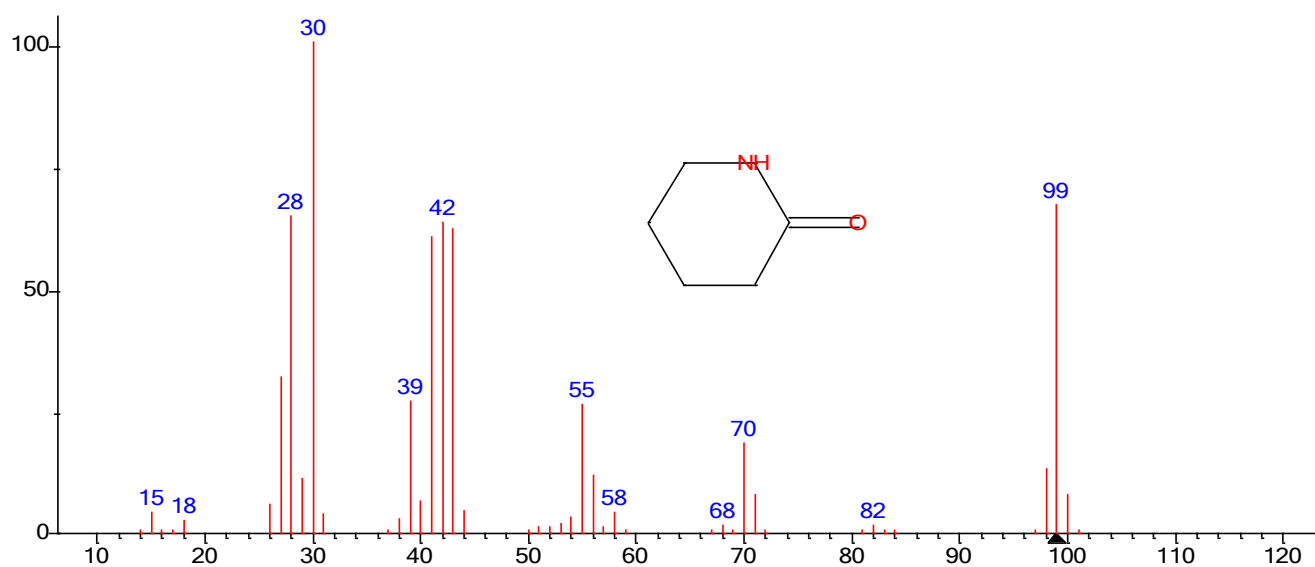
(wiley9) 2-Propanamine, 2-methyl- (CAS)



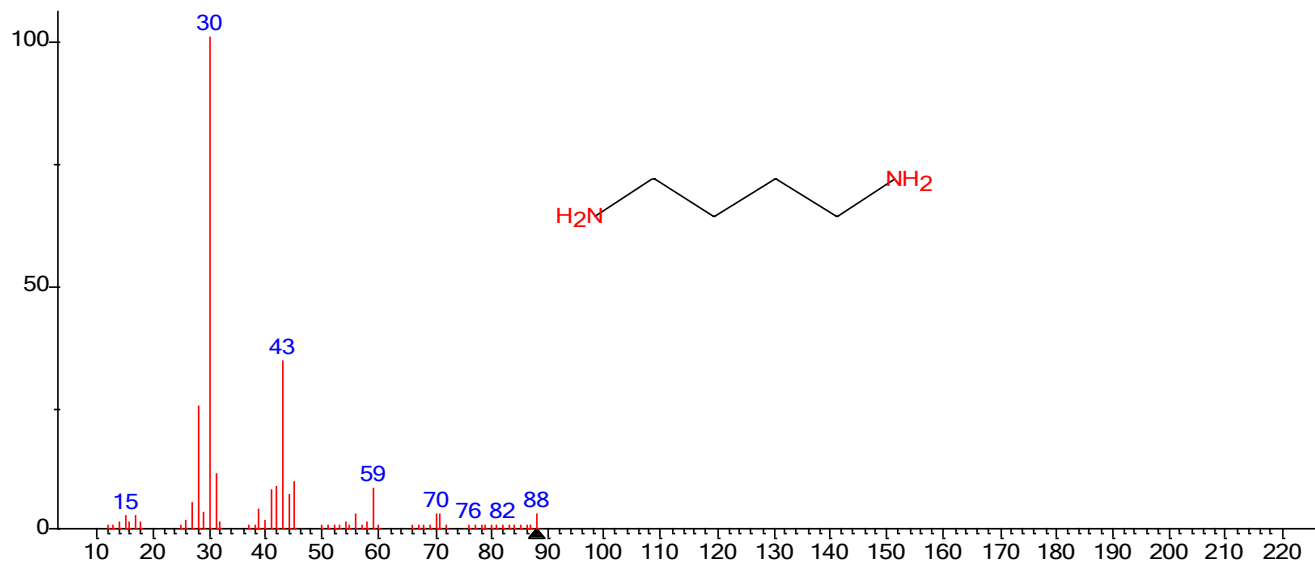
(wiley9) 2-(2-Aminoethylamino)ethane



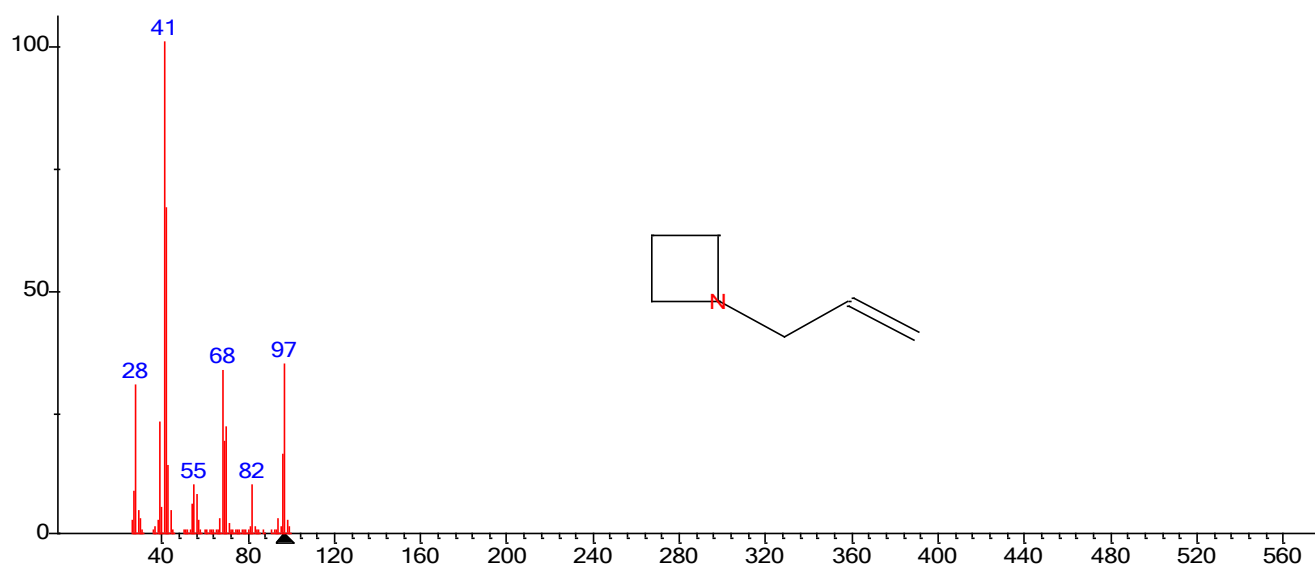
(wiley9) 1-Butanol, 2-amino- (CAS)



(wiley9) 2-Piperidinone (CAS)

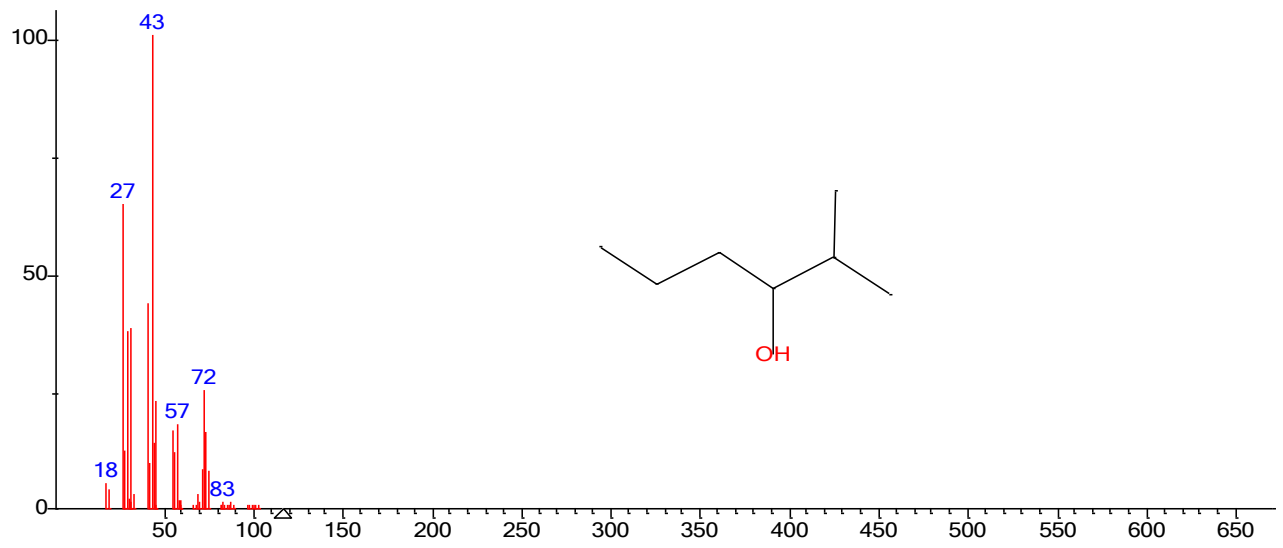


(mainlib) 1,4-Butanediamine

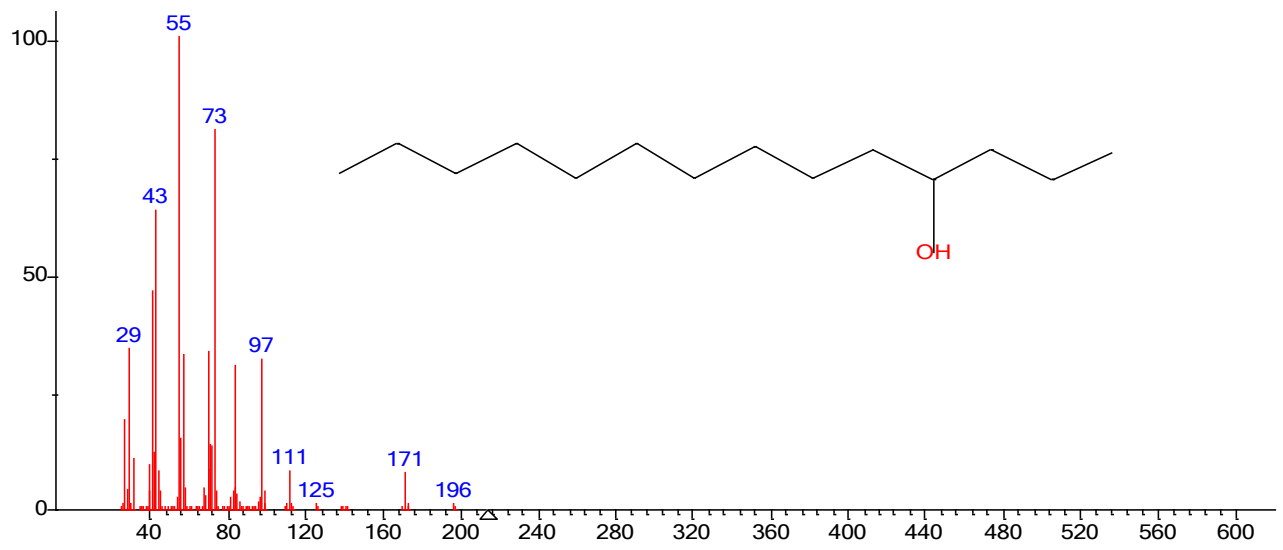


(wiley9) 1-Allylazetidene

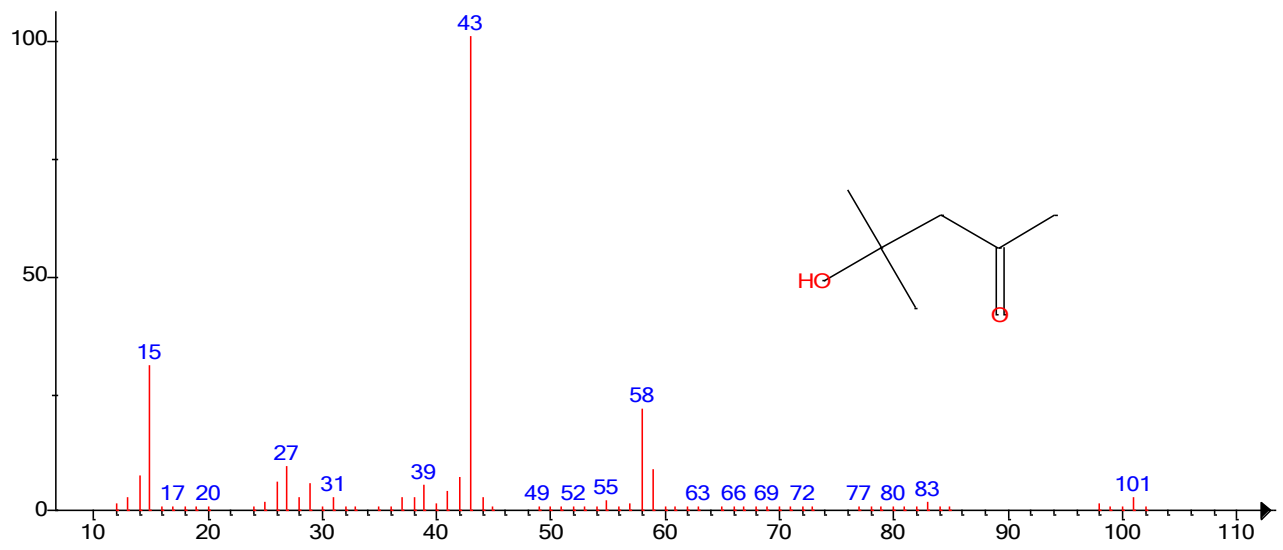
4. Кислородсодержащие соединения:



(wiley9) 3-Hexanol, 2-methyl- (CAS)



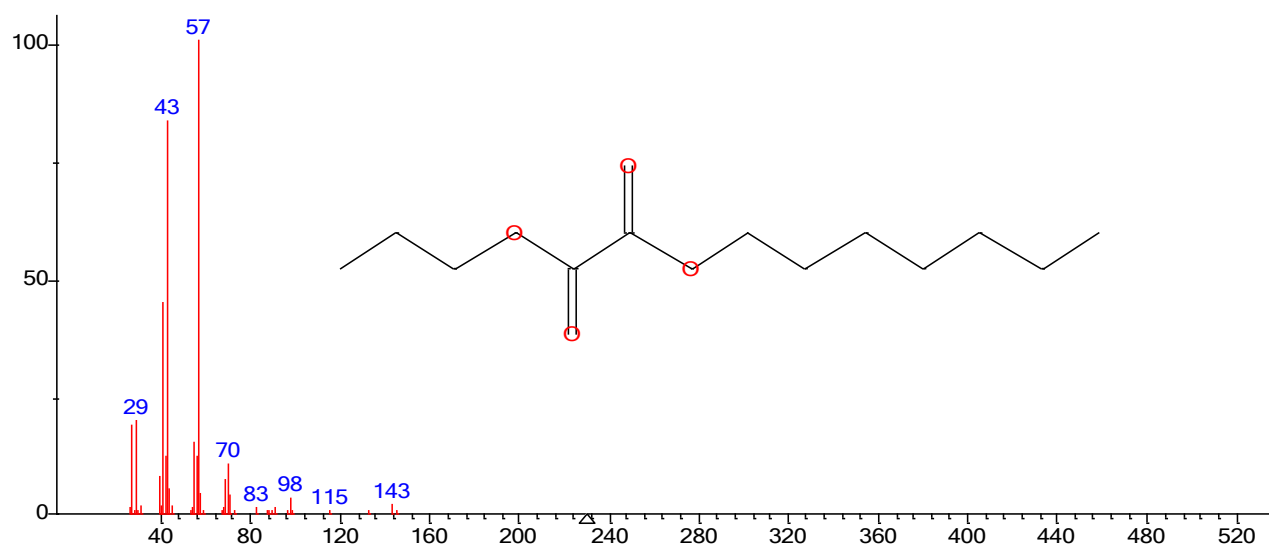
(replib) 4-Tetradecanol



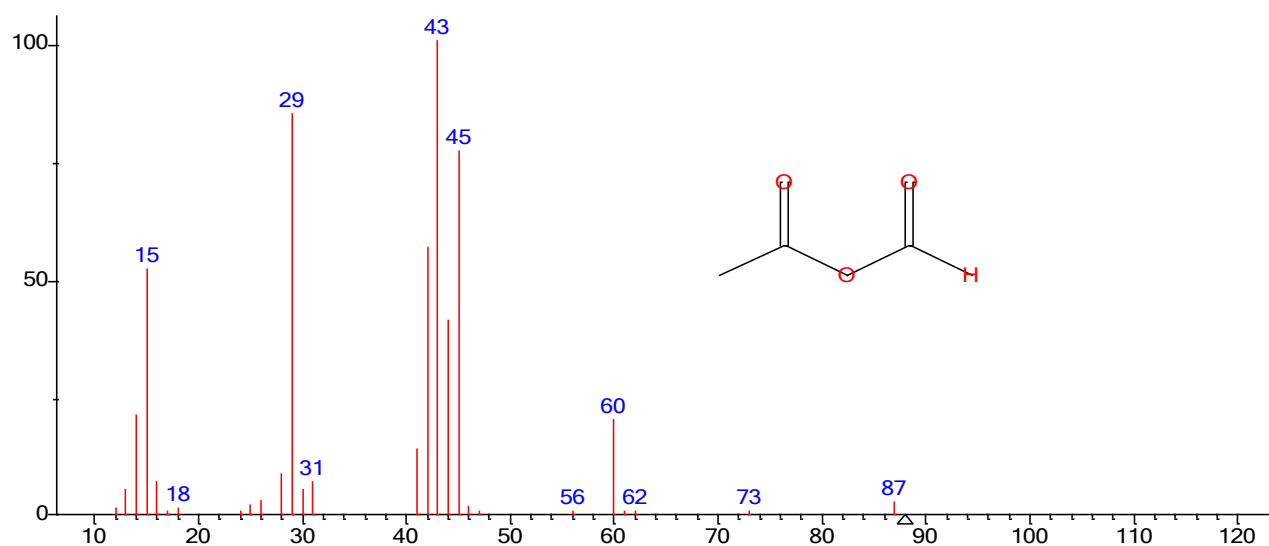
(wiley9) 2-Pentanone, 4-hydroxy-4-methyl- (CAS)



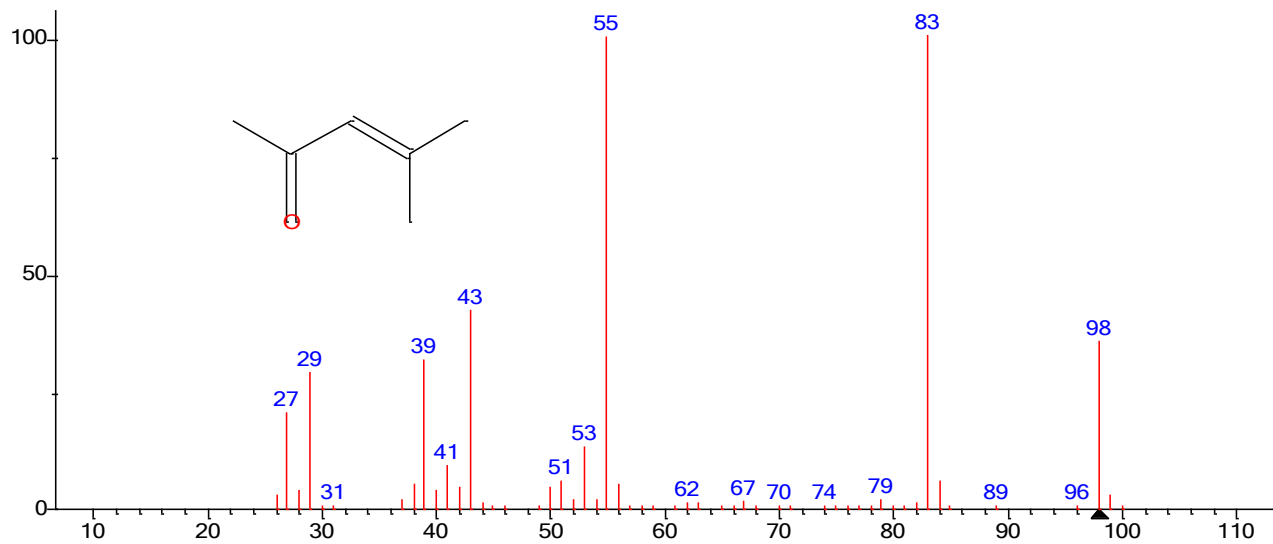
(mainlib) Pentanoic acid, octyl ester



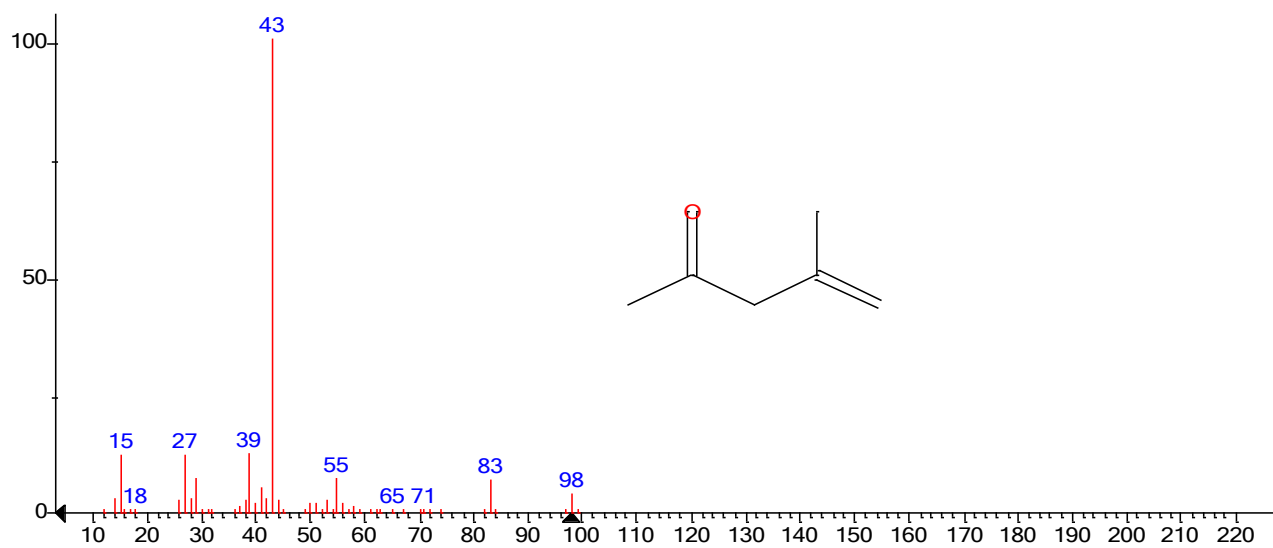
(mainlib) Oxalic acid, heptyl propyl ester



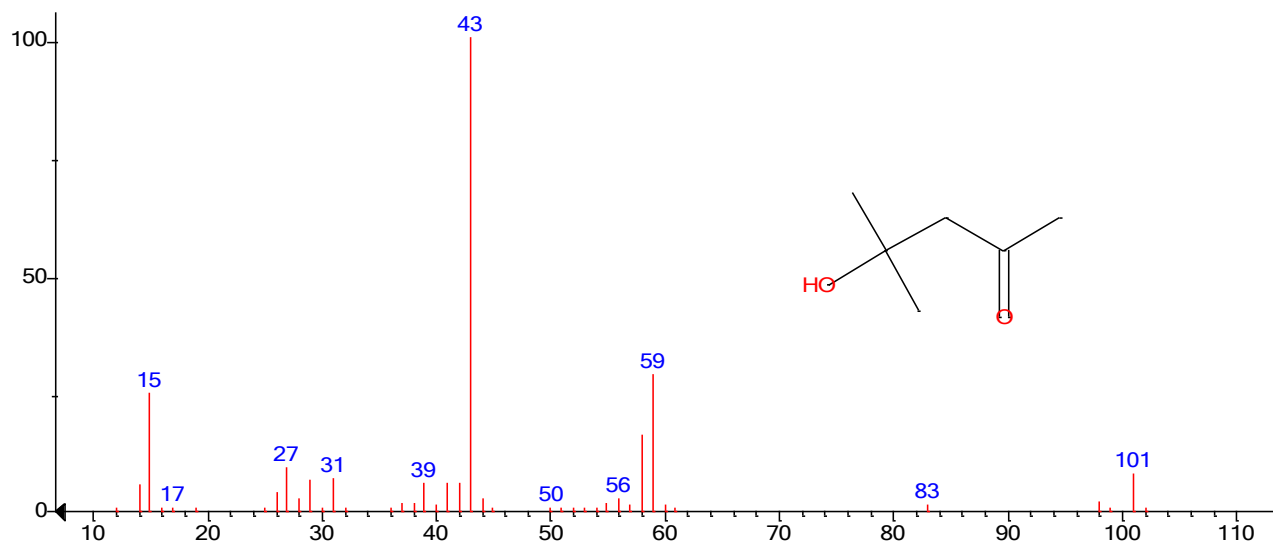
(wiley9) Acetic acid, anhydride with formic acid



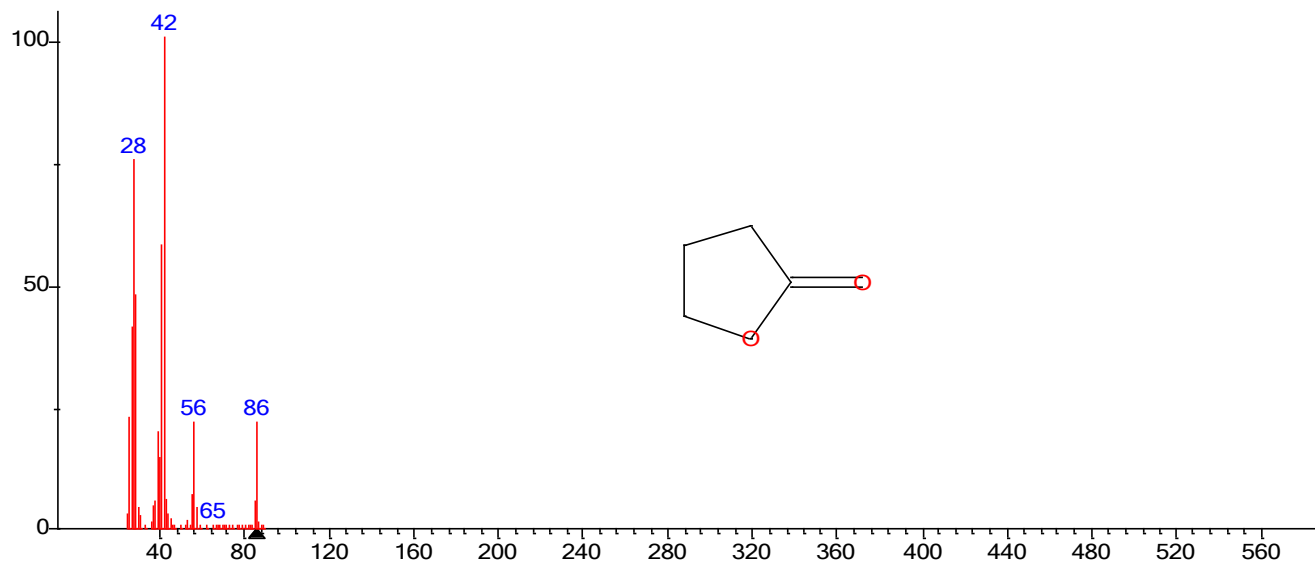
(wiley9) 3-Penten-2-one, 4-methyl- (CAS)



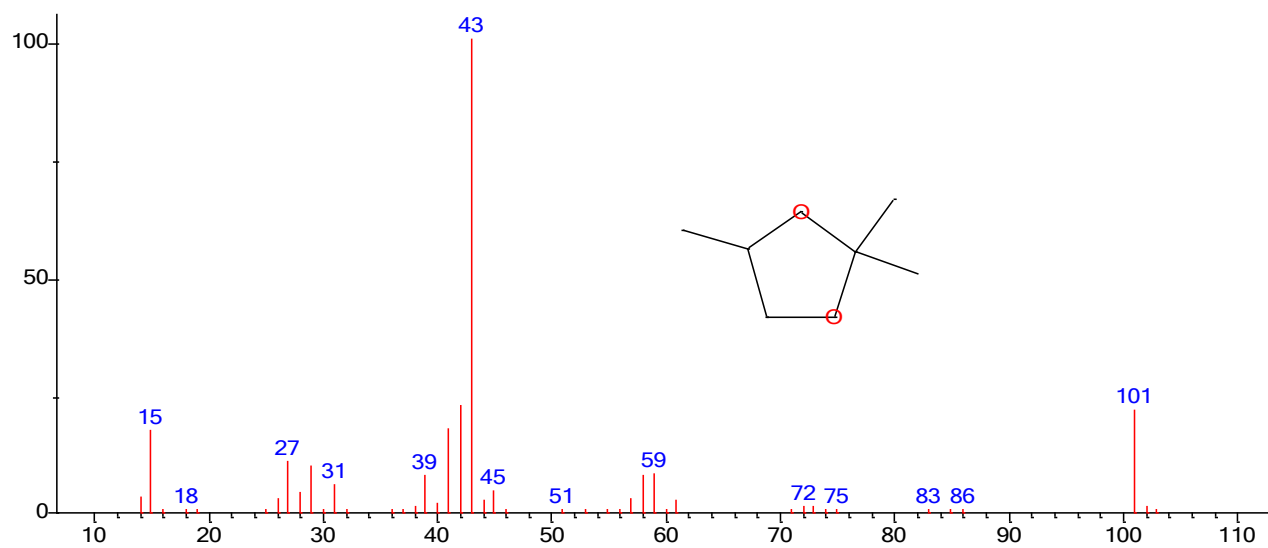
(wiley9) 4-Penten-2-one, 4-methyl- (CAS)



(wiley9) 2-Pentanone, 4-hydroxy-4-methyl- (CAS)

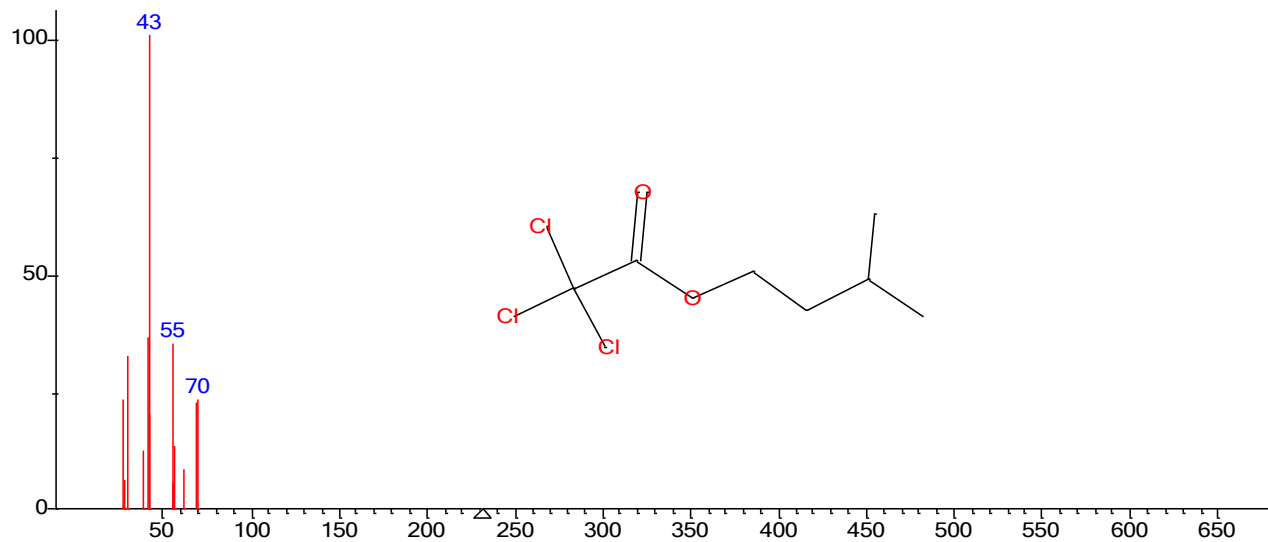


(wiley9) 2(3H)-Furanone, dihydro- (CAS)

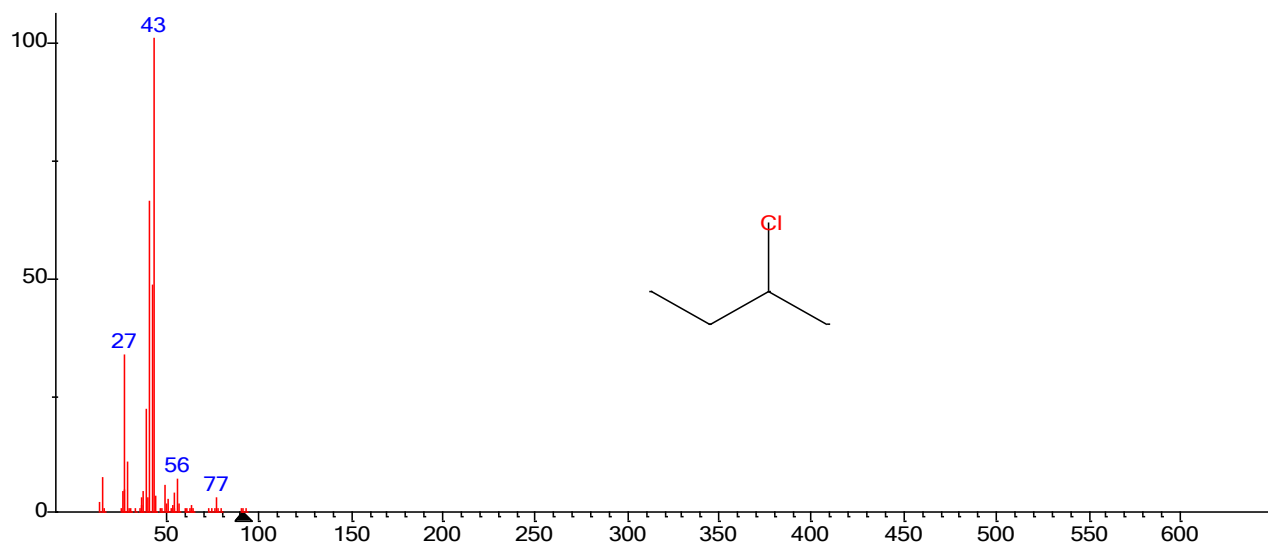


(wiley9) 1,3-Dioxolane, 2,2,4-trimethyl- (CAS)

5. Хлорсодержащие соединения:

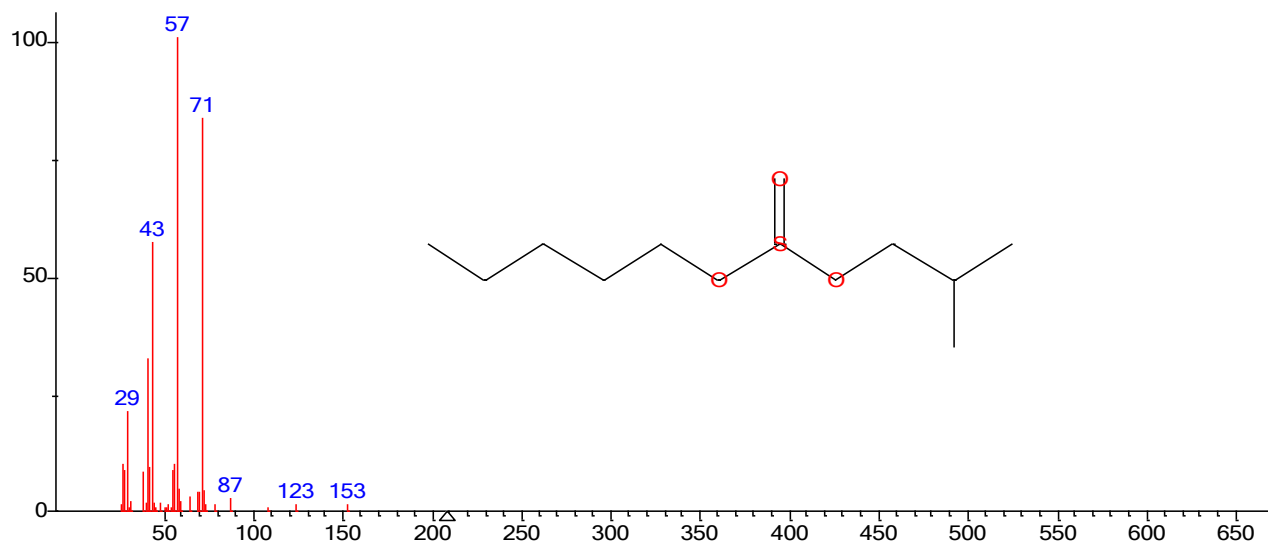


(wiley9) isopentyl trichloroacetate



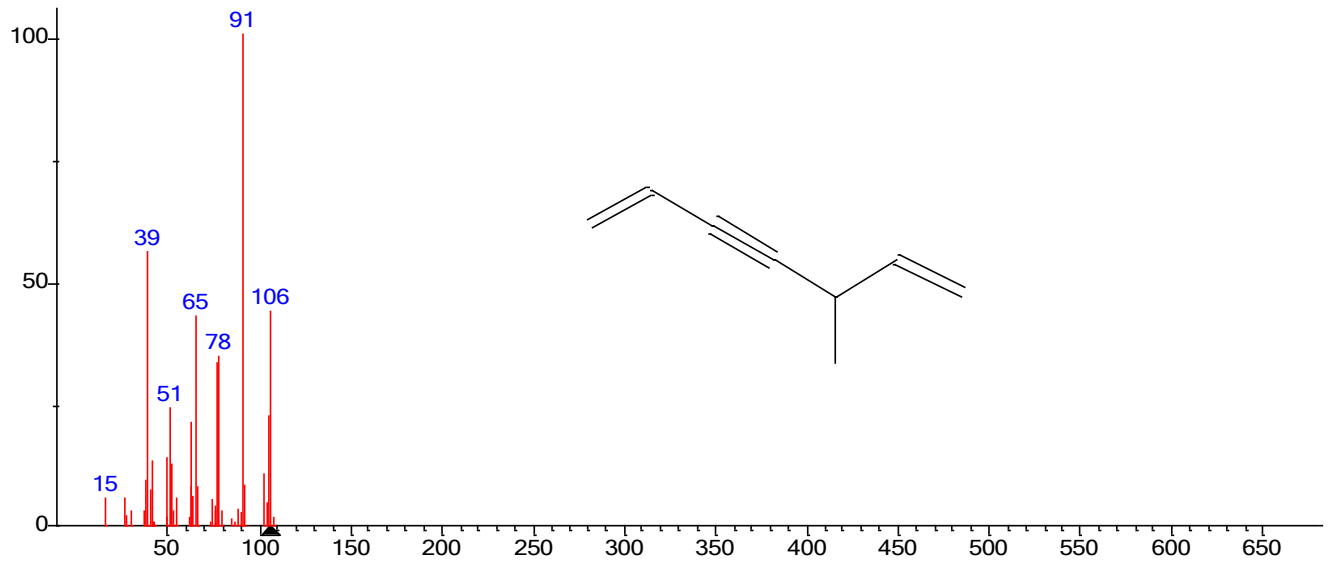
(wiley9) sec Butyl Chloride; 2-chlorobutane

6. Серосодержащие соединения:

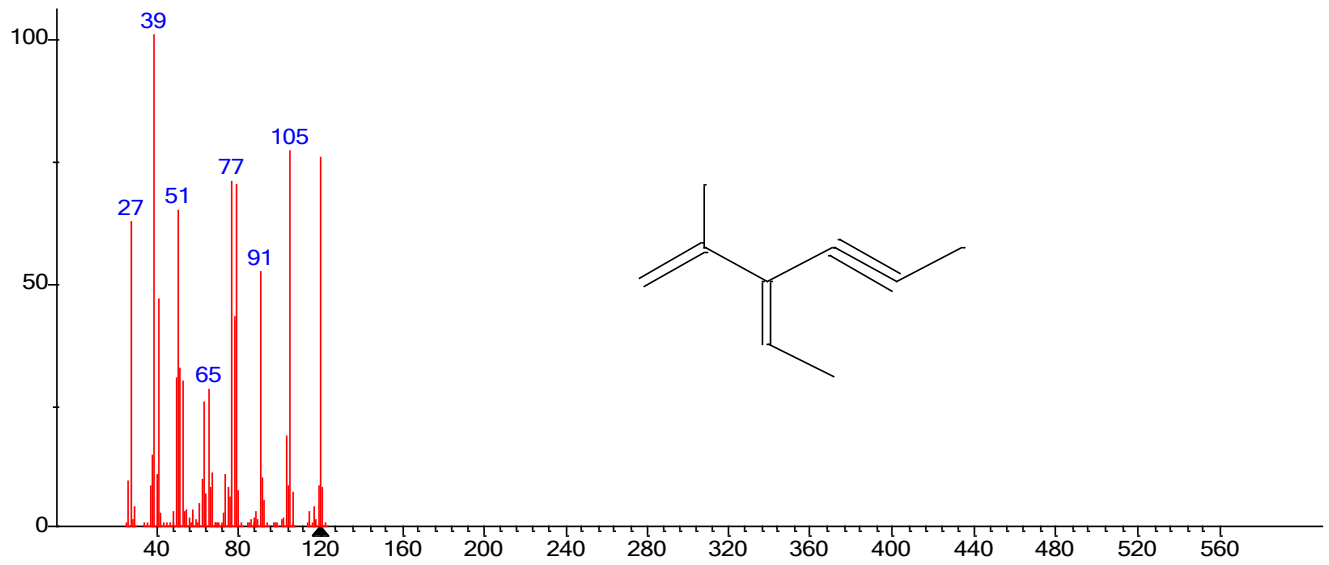


(mainlib) Sulfurous acid, isobutyl pentyl este

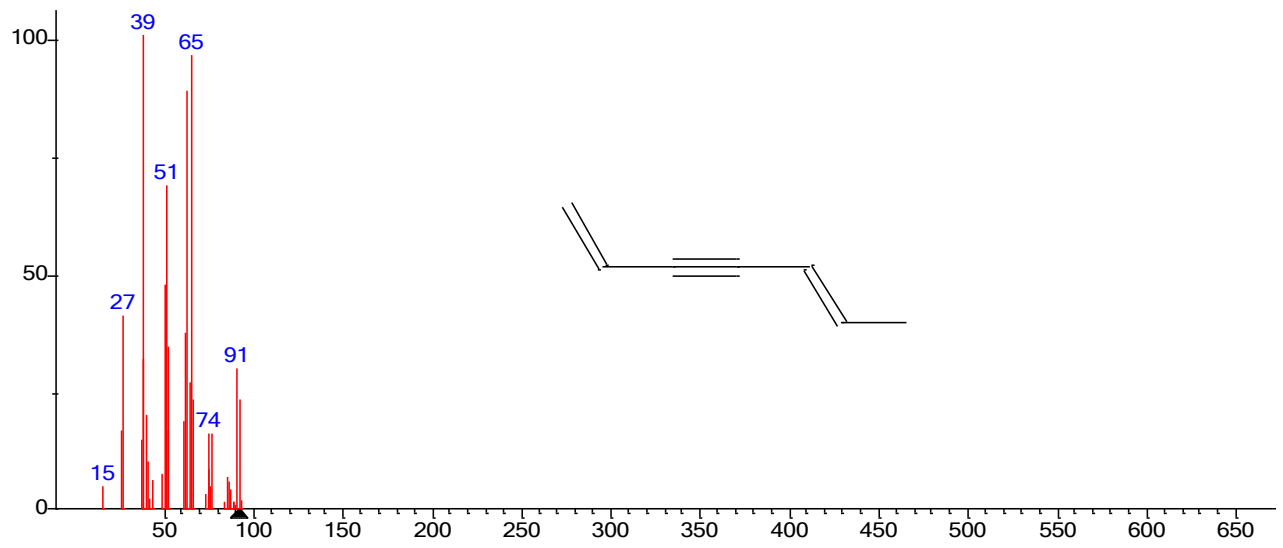
7. Другие:



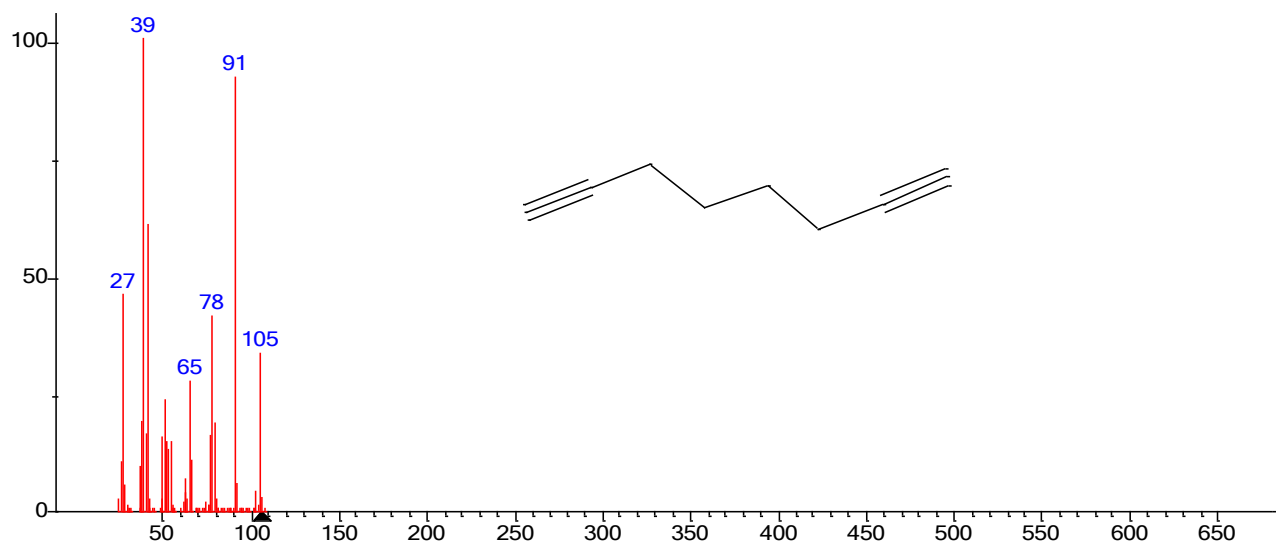
(mainlib) 1,6-Heptadien-3-yne, 5-methyl.



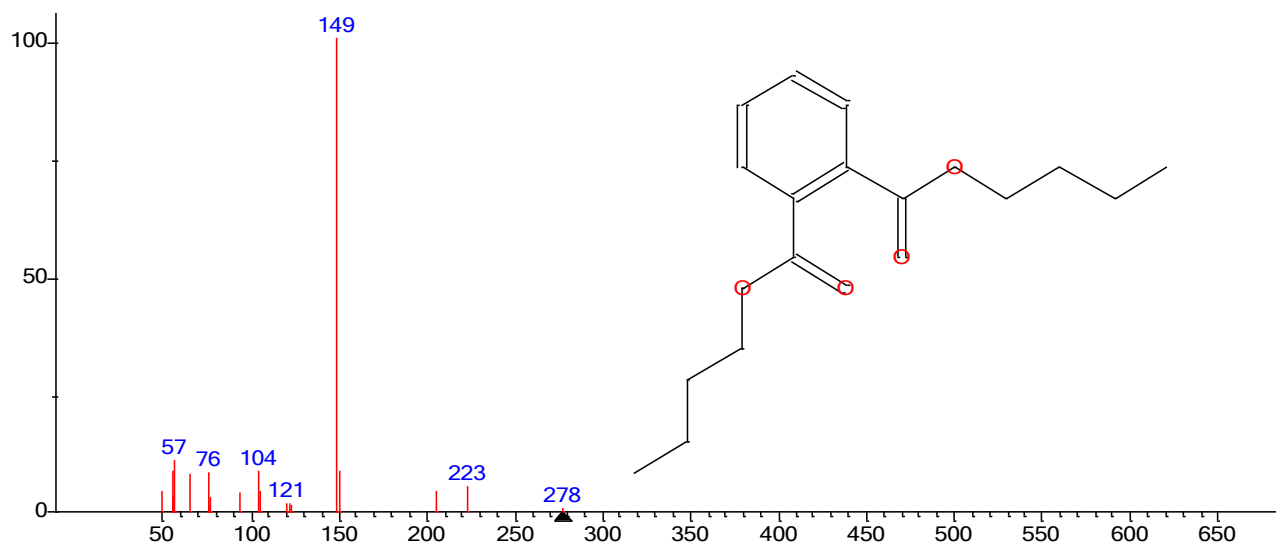
(wiley9) 1-HEXEN-4-YNE, 3-ETHYLIDENE-2-METHYL-



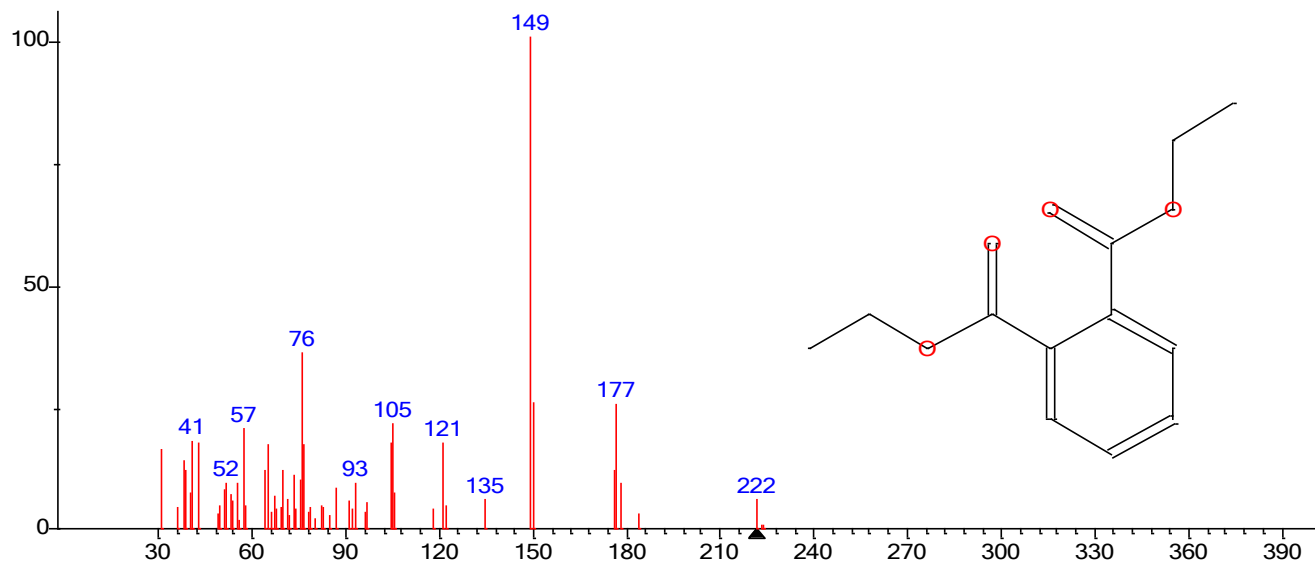
(replib) 1,5-Heptadien-3-yne



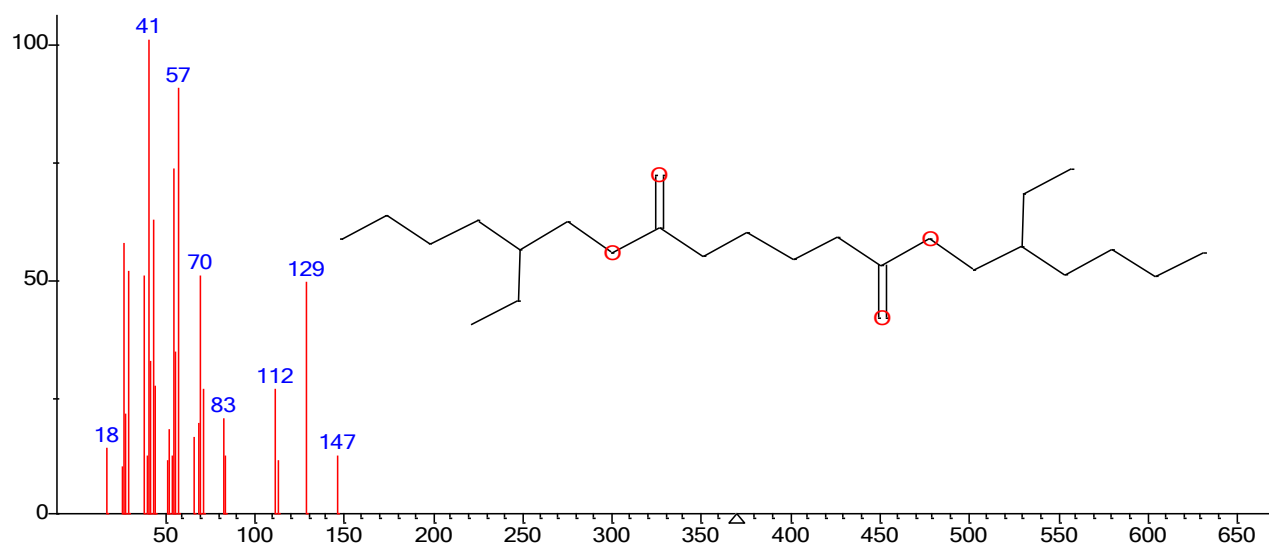
(wiley9) 1,7-Octadiyne (CAS)



(wiley9) 1,2-Benzenedicarboxylic acid, dibutyl ester (CAS)



(wiley9) 1,2-Benzenedicarboxylic acid, diethyl ester (CAS



(wiley9) Hexanedioic acid, bis(2-ethylhexyl) ester (CAS