

PHYTOCHEMICAL SCREENING AND ANTHELMINTIC ACTIVITY ON LEAVES OF *ABELMOSCHUS ESCULENTUS*.LINN.

T. Naveenkumar¹, D. Nireshkumar², S. Neelakandan³, B. Sangameswaran⁴, M. Suganya*⁵

^{1,2,3}Under Graduate, Department of Pharmacy, SSM College of Pharmacy, Chinniyampalayam, Erode, Tamil Nadu, India.

⁴Principal and HOD, Department of Pharmacognosy, SSM College of Pharmacy, Chinniyampalayam, Erode, Tamil Nadu, India.

⁵Assistant Professor, Department of Pharmacognosy, SSM College of Pharmacy, Chinniyampalayam, Erode, Tamil Nadu, India.

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***Corresponding Author: M. Suganya**

Assistant professor, Department of Pharmacognosy, SSM College of pharmacy, Cinniyampalayam, Erode, Tamilnadu, India.

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ABSTRACT

Abelmoschus esculentus (okra), is a widely cultivated plant, particularly in tropical and subtropical regions. Pharmacognostical involves the study of macroscopic characteristics of the leaves of *Abelmoschus esculentus* are large, lobed, and have a characteristic dark green colour. The leaf surface is rough with veins. The leaf's internal structure consists of a like upper epidermis, lower epidermis, vascular bundle, spongy parenchyma, palisade parenchyma. Then trichome and stomata are predominantly present in lower epidermis. Vascular bundle enlarged consist of xylem and Phloem. Preliminary physicochemical studies confirmed the purity of the drug. The phytochemical investigation showed that the presence of Alkaloids, Flavonoids, Terpenoids, Anthraquinone glycoside, Phenolic compounds, Saponins.

KEYWORDS: *Abelmoschus esculentus* (okra), trichomes, Saponins.

The Thin Layer Chromatography (TLC) studies of ethanolic extract of *Abelmoschus esculentus* can be possible by using the mobile phase of toluene: ethyl acetate: formic acid (5:4:0.2). This research work, the R_f values of sample ethanolic extract of *Abelmoschus esculentus* was found to be 0.8, it is near by the R_f value of standard drug of albendazole 0.65.

The Gas Chromatography Mass Spectroscopy (GCMS) studies of ethanolic extract of *Abelmoschus esculentus* have shown the presence of 46 components

S. No.	Components
1.	Acetic acid, pentyl ester
2.	p-Xylene
3.	2,5-Dihydroxybenzaldehyde, 2TMS derivative
4.	Pentadecafluorooctanoic acid, heptyl ester
5.	2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS
6.	2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS
7.	3-Heptafluorobutyropentadecane
8.	Pentasiloxane, dodecamethyl-
9.	Cyclohexasiloxane, dodecamethyl-
10.	Cyclohexasiloxane, dodecamethyl-
11.	Cyclopentasiloxane, decamethyl-
12.	4-Amino-5-cyclohexyl-4H-1,2,4-triazol-3-yl hydrosulfide, 2TMS derivative
13.	Octadecane-1,2-diol, 2TMS derivative
14.	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-
15.	Cyclohexasiloxane, dodecamethyl-
16.	Cyclohexasiloxane, dodecamethyl-
17.	3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
18.	3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
19.	Hexasiloxane, tetradecamethyl-
20.	1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsilyloxy) hexasiloxane
21.	2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative
22.	1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsilyloxy) hexasiloxane
23.	Cycloheptasiloxane, tetradecamethyl-
24.	Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-bis[(trimethylsilyloxy)-
25.	2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative
26.	Bis(heptamethylcyclotetrasiloxyl)siloxane
27.	Diethyl Phthalate
28.	Bis(heptamethylcyclotetrasiloxyl)siloxane
29.	Pyrogallol, 3TBDMS derivative
30.	Cyclooctasiloxane, hexadecamethyl-
31.	N-(Trifluoroacetyl)-N,O,O', O"-tetrakis (trimethylsilyl) norepinephrine
32.	n-Pentadecanol
33.	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl-
34.	Pyrogallol, 3TBDMS derivative
35.	2-(2',4',4',6',6',8', 8'-Heptamethyltetrasiloxan-2'-yloxy)-2,4,4,6,6,8,8,10,10-nonan
36.	Decane, 3,7-dimethyl-
37.	Heptasiloxane, hexadecamethyl-
38.	Neophytadiene
39.	3-Methylene-7,11-dimethyl-1-dodecene
40.	1,9-Nonanediol
41.	N-(Trifluoroacetyl)-N,O,O', O"-tetrakis (trimethylsilyl) norepinephrine
42.	n-Decanoic acid
43.	Heptasiloxane, hexadecamethyl-
44.	N-(Trifluoroacetyl)-N,O,O',O"-tetrakis (trimethylsilyl) norepinephrine
45.	3-Methylene-7, 11-dimethyl-1-dodecene
46.	Hexasiloxane, tetradecamethyl-

The anthelmintic activity was carried out by (earthworm inhibition method). The results indicate that as the concentration of the extract increased, the percentage of earthworm inhibition also increased, demonstrating its potential as an anti-helmintic agent. At the highest concentration (500 µg/mL), the ethanolic extract achieved 100% inhibition. At the concentration (250 µg/mL), the ethanolic extract achieved 33.3% inhibition. Other concentration 100 µg/mL, 50 µg/mL, 10 µg/mL & control has 0% inhibition. These findings suggest that the ethanolic extract of *Abelmoschus esculentus* possesses significant earthworm inhibitory activity.

INTRODUCTION

HERBAL MEDICINE

The world population growth has led to an increase in nutritional deficiencies and disease related to the lack of essential nutrients in human diet, particularly affecting vulnerable populations. One of the world's greatest challenges is to secure sufficient and healthy food for all, and to do so in an environmentally sustainable manner. Moreover, vegetal source may contain substances harmful for human health, affecting the bioavailability of nutrients.^[1]

When balanced these three forces ensure that the body is healthy, but when they are abnormal or unbalanced, disease follows. India has a rich cultural heritage of traditional medicines which chiefly comprised the two widely flourishing systems of treatments i.e. Ayurvedic and Unani systems since ancient times.^[2]

Role of 'WHO' in herbal medicine

To traditional health systems (including herbal medicine) as holistic That of viewing man in his totality within a wide ecological spectrum, and of emphasizing the view that ill health or disease is brought about by an imbalance or disequilibrium of man in his total ecological system and not only by the causative agent and pathogenic evolution 'WHO' probably implying that the indigenous system drugs (including herbal medicine) restore the imbalance leading to the cure of ill health or disease. However, it helped the inclusion of proven traditional remedies in national drug policies and regulatory approval by developing countries. In 1991 'WHO' developed guidelines for the assessment of herbal medicine, and the 6th International Conference of Drug Regulatory Authorities held in Ottawa in the same year ratified the same.

The salient features of WHO guidelines are:

- **Quality assessment:** Crude plant materials or extract plant preparation and finalized product.
- **Stability:** Self life.
- **Safety assessment:** Documentation of safety based on experience and toxicological studies.
- **Assessment of efficacy:** Documented evidence of traditional use and activity determination (Animals and human).^[3]

Abelmoschus esculentus(okra)

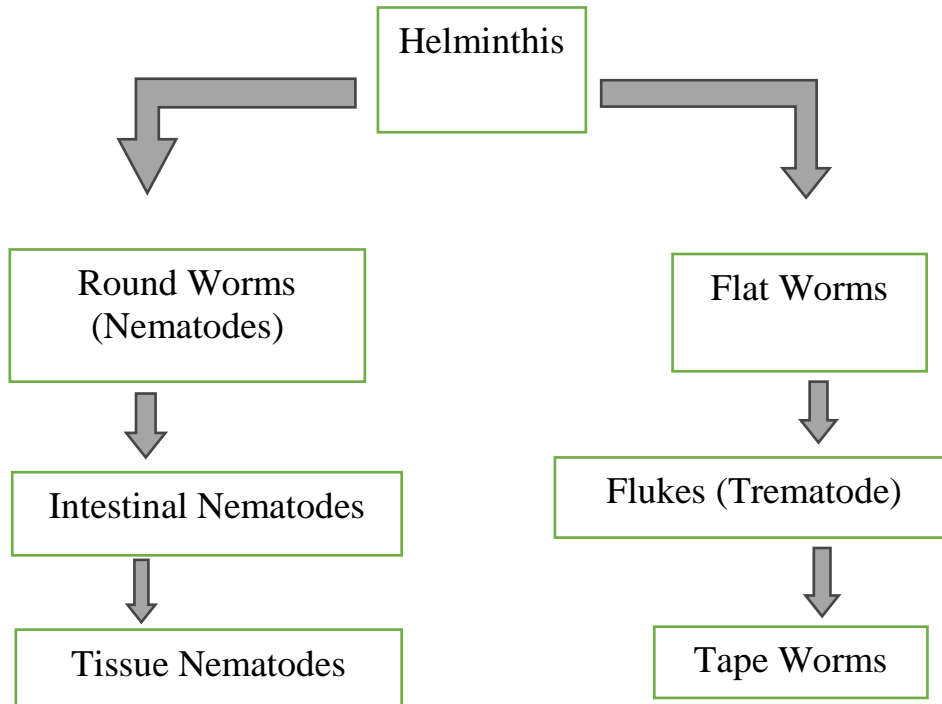
Abelmoschus esculentus (okra), is a widely cultivated plant, particularly in tropical and subtropical regions. Pharmacognostical involves the study of macroscopic characteristics of the leaves of *Abelmoschus esculentus* are large, lobed dark green colour. The leaf surface is rough with veins. The leaf's internal structure consist of an like upper epidermis, lower epidermis, vascular bundle, spongy parenchyma, pallisade parenchyma. Then trichome and stomata are predominantly present in lower epidermis. Vascular bundle enlarged consist of xylem and Phloem. As we found in the powder microscopy covering trichomes, xylem vessels with spiral thickening, glandular trichomes, calcium oxalate crystals, paracytic stomata, vessels fragments-fibers & chloroplast mucilage.^[4]

ANTIHELMENTIC ACTIVITY

Helminthes is commonly called as parasitic organism that lives in a human or another animal and derives its nourishment from its host. The word helminthesis derived from Greek word helmins meaning worm. It is macroscopic, multicellular organism, having their own digestive, excretory, reproductive and nervous system.

In the 21st century there are two major challenges posed by the wide- spread prevalence of parasitic nematodes. First, many anthelmintic drugs are losing their effectiveness because nematode strains with resistance are emerging. Second, serious concerns regarding the environmental impact of the nematicides used for crop protection have prompted legislation to remove them from use, leaving agriculture at increased risk from nematode pests.^[5]

CLASSIFICATION OF HELMINTHIS



Common helminths and the problems they cause include the following:

Roundworm: Roundworms hatch and live in the intestines. The eggs usually enter the body through contaminated water or food or on fingers placed in the mouth after the hands have touched a contaminated object. Symptoms of their presence include fatigue, weight loss, irritability, poor appetite, abdominal pain and diarrhea. Treatment with medication results in a cure in about a week. Without treatment, anemia and malnutrition can develop.

Pinworm: Also called seaworms and threadworms, pinworms hatch and live primarily in the intestines. The eggs usually enter the body through the anus, through the nose or mouth via inhaled air, or through the mouth on fingers that have touched a contaminated object. Symptoms of their presence include anal itching and sometimes pale skin and stomach discomfort. If pinworms enter the vagina in females, discharge and itching may develop. Pinworms do not cause serious complications. Treatment with medication results in a cure within days.

Trichina spiralis: This worm lives in the intestines and causes a serious illness known as trichinosis. The eggs usually enter the body via raw or undercooked pork, sausage or bear meat. In the intestines, the eggs hatch, mature, and migrate to other parts of the body through the bloodstream and the lymphatic system. Early symptoms include vomiting, diarrhea, and abdominal cramps. In time, a high fever, puffiness of the face and muscle pain develop. Eventually the worms can penetrate the muscles, the heart and the brain and can cause death. Treatment with an anti-worm drug such as thiabendazole, as well as bed rest and a physician's care, can cure trichinosis. Recovery may take several months.

Diagnosis of trichinosis sometimes requires analysis of a tissue sample (biopsy) taken from muscle.

Tapeworm: Tapeworms live in the intestines. The eggs usually enter the body via raw or uncooked beef. Symptoms of their presence are usually absent. However, some patients experience abdominal pain, fatigue, weight loss, and diarrhea. Treatment with medication results in a cure within days.

Fluke: Flukes live in different locations in the body, including the intestines, bladder, rectum, liver, spleen, lungs and veins. Flukes first mature inside freshwater snails. After leaving the snails, they can enter the body of humans by penetrating the skin of persons swimming, bathing or washing in water where flukes are active. Infected persons can re-contaminate the water by urinating or defecating in it. Most infected persons experience no symptoms, muscle aches, coughing, chills and fever. Flukes pass out of the body, but persons can become infected again and again. In time, the repeated infections can damage the liver, bladder, intestines and lungs. In rare cases, flukes can invade the spinal cord or brain and cause seizures and paralysis. Fluke-caused illnesses are classified as schistosomiasis (also called bilharziasis).^[6]

ANTHELMINTIC AGENT

Drugs that are used in the manifestation and treatment of the worm infection is called as anthelmintics or anti-helminthics or antiparasitic agents.

It is a group of antiparasitic drugs that expel parasitic worms (helminthes) that work by either stunning (vermifuge) or killing (vermicide) them.

Anthelmintics or antihelminthics are a group of antiparasitic drugs that expel parasitic worms (helminths) and other internal parasites from the body by either stunning or killing them and without causing significant damage to the host. They may also be called vermifuges (those that stun) or vermicides (those that kill). Anthelmintics are used to treat people who are infected by helminths, a condition called helminthiasis. These drugs are also used to treat infected animals.

Almost 350 species of helminthes have been found in humans, and most colonise the gastrointestinal tract(GIT). Humans are primary host for helminthes infections, in the sense that they harbor the sexually mature form that reproduces. Eggs or larvae then pass out of the body and infect the secondary (intermediate) host. Helminthiasis is more common in developing countries with poorer personal and environmental hygiene.

They harm the host by depriving him of food, causing blood loss, injury to organs, intestinal or lymphatic obstruction and by secreting toxins. Helminthiasis is rarely fatal, but is a major cause of ill health.

Anthelmintic is the term used to describe a drug used to treat infections of animals with parasitic worms. This includes both flat worms, e.g., flukes (trematodes) and tapeworms (cestodes) as well as round worms (nematodes).

The World Health Organization estimates that 2 billion people harbour parasitic worm infections causing increased morbidity and mortality, while parasitic worms that infect livestock are an important animal welfare issue and place a major economic burden on food production. Domestic pets are also susceptible to parasitic worm infection and it is of note that the companion animal market is a key economic consideration for animal health companies undertaking drug discovery programmes.

The majority of anthelmintics and nematicides are limited in their action between trematodes, cestodes, and nematodes, for example, praziquantel, a drug used in the treatment of most humans infected with trematodes or cestodes and thought to act by disrupting calcium homeostasis (Greenberg, 2005), has no activity against nematodes. Only benzimidazoles have cross-phyla activity and even they are more active against nematodes than against cestodes or trematode.^[7]

MATERIALS AND METHOD

Plant collection, identification and authentication

The fresh leaves of the selected plant were collected from paruvachi, erode district, Tamilnadu in the month of December 2024. The collected specimens were botanically identified and authenticated by Dr. P.Radha., Research officer (Botany) Sci-II, I/C. It was identified as *Abelmoschus esculentus* belonging to the family Malvaceae.

Macroscopic evaluation

The fresh leaves *Abelmoschus esculentus* were collected and different organoleptic features like colour, odour, taste, size, shape, type were observed. These parameters are considered useful in the qualitative control of the crude drug.

Preparation of Powder Sample

The fresh leaves *Abelmoschus esculentus* were collected and dried under the sunlight for 10 days. The dried leaves were powdered by mixer grinder as coarse particles.

EXTRACTION OF PLANT MATERIAL

- Extraction of *ABELMOSCHUS ESCULENTUS* leaves by cold maceration method using ethanol as a solvent.
- 500ml of ethanol were mixed in 60 gm of powder sample of *ABELMOSCHUS ESCULENTUS* leaves in round bottom flask.
- Then the flask were closed by cap and covered with aluminium foil.
- Tightly tied & kept for 5 days.



- After 5 days the macerated solution was filtered by whatman filter paper.
- The filtrate is transfer into china dish.
- The china dish with sample kept at room temperature for 7 days.
- For the purpose of evaporation solvent.
- After evaporation the concentrated sample were collected by scraping with the help of spatula.^[8]



PRELIMINARY PHYTOCHEMICAL ANALYSIS

Preliminary phytochemical analysis is a systematic procedure used to identify the bioactive compounds in plants. These compounds, often secondary metabolites, are responsible for various therapeutic and pharmacological activities.^[9-11]

THIN LAYER CHROMATOGRAPHY(TLC)

Thin layer chromatography (TLC) is a quick, sensitive, and inexpensive technique used to determine the number of components in a mixture, verify the identity and purity of a compound, monitor the progress of a reaction, determine the solvent composition for preparative separations, and analyse the fractions obtained from column chromatography.

Principle

Thin layer chromatography is also based on the principle of separation.

1. The separation depends on the relative affinity of compounds towards stationary and the mobile phase.
2. The compounds under the influence of the mobile phase (driven by capillary action) travel over the surface of the stationary phase. During this movement, the compounds with higher affinity to stationary phase travel slowly while the others travel faster. Thus, the separation of components in the mixture is achieved.
3. Once separation occurs, the individual components are visualized as spots at a different level of travel on the plate. Their nature or characters are identified using suitable detection techniques.

System Components

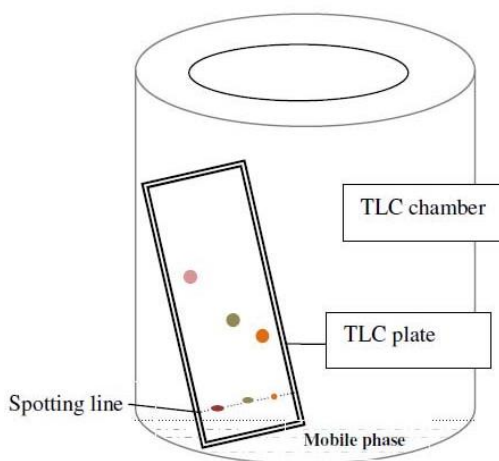
TLC system components consist of

1. **TLC plates**, preferably ready-made with a stationary phase: These are stable and chemically inert plates, where a thin layer of stationary phase is applied on its whole surface layer. The stationary phase on the plates is of uniform thickness and is in fine particle size.
2. **TLC chamber**. This is used for the development of the TLC plate.
3. **Mobile phase**. This comprises of a solvent or solvent mixture.

Name of the sample	Solvent system
Ethanolic extract of <i>ABELMOSCHUS ESCULENTUS</i>	Toluene- 5ml Ethyl acetate- 4ml Formic acid- 0.2 ml

Procedure

1. With a pencil, 0.5 cm of a thin mark is made at the bottom of the plate to apply the sample spots.
2. Then, samples solutions are applied on the spots marked on the line in equal distances.
3. The mobile phase is poured into the TLC chamber to a levelled a few centimetres above the chamber bottom.
4. Now, the late prepared with sample spotting is placed in the TLC chamber so that the side of the plate with the sample line is facing the mobile phase. Then the chamber is closed with a lid.
5. The plate is then immersed, such that the sample spots are well above the level of mobile phase for development.
6. Allow sufficient time for the development of spots. Then remove the plates and allow them to dry. The sample spots can now be seen in a suitable UV light chamber.^[12]



$$\text{Formula} = \frac{\text{Distance travelled by the compound}}{\text{Distance travelled by the solvent front}}$$

GAS CHROMATOGRAPHY MASS SPECTROSCOPY(GCMS)

Gas chromatography/mass spectroscopy (GC/MS) combines two analytical tools to identify and measure the concentration of chemicals found in foods, consumer products, pharmaceuticals, fuels, the environment, and more.

ANALYTICAL LINE 1

# of rinse with presolvent	: 3
# of rinse with solvent (post)	: 3
# of rinse with sample	: 3
Plunger speed (suction)	: High
Viscosity comp. time	: 0.2 sec
Plunger speed (injection)	: High
Syringe Insertion Speed	: High
Injection Mode	: Normal
Pumping Times	: 5
Inj. Port Dwell time	: 0.3 sec
Terminal Air Gap	: No
Plunger Washing Speed	: High

Washing volume : 6uL
 Syringe suction position : 0.0 mm
 Syringe Injection position : 0.0 mm
 Use 3 solvent vial : 1 vial
 Column Oven Temp : 50.0°C
 Injection temp : 250.00°C
 Injection mode : Split
 Flow control mode : Linear Velocity
 Pressure : 68.1 kPa
 Total flow : 16.2 mL/min
 Column flow : 1.20 mL/min
 Linear velocity : 39.7 cm/sec
 Purge flow : 3.0 mL/min
 Split ratio : 10.0
 High pressure injection : OFF
 Carrier gas saver : OFF
 Splitter hold : OFF

Oven temp, Program

Rate	Temperature	Hold time (min)
-	50.0	0.00
6.00	280.0	2.00

<Ready Check Heat Unit>

Column Oven : Yes

SPL1 : Yes

MS : Yes

<Ready Check Detector (FTD/BID)>

<Ready Check Baseline Drift>

<Ready Check Injection Flow>

SPL1 Carrier : Yes

SPL1 Purge : Yes

<Ready Check APC Flow>

<Ready Check Detector APC Flow>

External Wait : No

Equilibrium Time : 0.5 min

[GC Program]

Ion Source Temp : 200.00°C

Interface Temp : 250.00°C

Solvent Cut Time : 3.50 min

Detector Gain Mode : Relative to the Tuning Result

Detector Gain : +0.00 kV
Threshold : 1000

[MS Table]

--Group 1 – Event 1 –

Start Time : 3.00 min
End Time : 35.00 min
ACQ Mode : Scan
Event Time : 0.30 sec
Scan Speed : 1666
Start m/z : 50.00
End m/z : 500.00
Sample Inlet Unit : GC
[MC Program] Use MS Program : OFF

Anthelmintic activity

The Anthelmintic activity was assessed by the procedure of WHO with some modification. For the busy test, *Lumbricus terrestris*. were taken in five batches along with the control. The numbers of dead *Lumbricus terrestris* were counted after 48 h exposure of the sample and the percentage of mortality was reported from the average of five replicates. The percentage of mortality was analysed using the following formula was calculated using Graph Pad Prism software (USA).

Preparation of Earthworms

1. Collect earthworms (*Lumbricus terrestris*) from a local market or breed them in the laboratory (WHO, 2017).
2. Wash the earthworms with distilled water to remove any dirt or debris.
3. Keep the earthworms in a container with moist soil and maintain a temperature range of 20-25°C.

In Vitro Anthelmintic Activity Assay

1. Prepare a series of concentrations (e.g., 10, 50, 100, 250,500 mg/mL) of the plant extract in distilled water and control.
2. Place 5-6 earthworms in a Petri dish containing 10 mL of the extract solution.
3. Observe the earthworms for paralysis and/or death at 1hr.
4. Repeat the experiment for each concentration of the plant extract.

Controls

1. Use distilled water as a control.

Data Analysis

1. Calculate the paralysis and/or death for each concentration of the plant extract.
2. Plot a graph of concentration vs. paralysis and/or death time.
3. Discuss the potential anthelmintic activity of the plant extract.^[13]

RESULTS AND DISCUSSION

Macroscopic character The macroscopic characteristic of *Abelmoschus esculentus*. Linn. leaves include:

Color : Bright green

Shape : Heart – shaped, with 5-7 lobes, and a serrated edge

Size : 10- 20 centimeters (4-8 inches) long and broad

Texture : Covered in small bristles or spines

Arrangement : Spirally arranged, with leaves growing alternately on the stem

Petiole : Long - petioled , with petioles up to 50 centimeters long.

EXTRACTION**PERCENTAGE YIELD OF TOTAL EXTRACT**

Percentage yield, colour, consistency of ethanolic extract of *Abelmoschus esculentus*.Linn.

Extract/Fraction	Percentage yield (%w/w)	Colour	Consistency
Ethanol extract	8.253	Dark green	Semisolid

PRELIMINARY PHYTOCHEMICAL SCREENING On ETHANOLIC EXTRACT OF ABELMOSCHUS ESCULENTUS

Preliminary phytochemical analysis

S.no	Chemical test	Test performed	Observation	Result
1.	Alkaloids	+ Mayer's reagent	Absence of Cream coloured precipitate	-
		+ Dragendorff's reagent	Presence of reddish brown precipitate	+
2.	Flavonoids	Alkaline test	Intense of yellow colour with dil.NaOH that turns colourless on adding dil.Hcl	+
		H ₂ SO ₄	Presence of reddish orange colour	+
		Shinoda test	Absence of crimson pink colour	-
3.	Sterols (Liebermann test)	+ CHCl ₃ + Acetic anhydride + Conc.H ₂ SO ₄	Absence of reddish brown ring	-
4.	Terpenoids (Liebermann test)	+ CHCl ₃ + Acetic anhydride + Conc. H ₂ SO ₄	Presence of green colour	+
5.	Anthraquinone Glycoside	+ FeCl ₃ + Conc. HCl + diethyl ether + Ammonia	Presence of reddish orange colour	+
6.	Anthocyanin HCl Test	Anthocyanin HCl Test	No Colour change	-
7.	Proteins	+ 2% Ninhydrin reagent	Absence of Purple colour	-
		+ 2% CuSO ₄ + 95% ethanol + KOH pellet	Absence of blue colour	-
		+ conc. HNO ₃	Presence of Yellow colouration	+
8.	Phenolic compounds	+ 5% neutral FeCl ₃	Presence of bluish green coloured solution	+
		Gelatin test	Presence of white precipitate	+
		+ Ellagic acid test Absence of nigger brown precipitate	+ Ellagic acid test Absence of nigger brown precipitate	-
9.	Quinones	Conc. HCl	Presence of green colour	+
		Alcoholic KOH	Absence of reddish solution	-
10.	Carbohydrates	Molisch's test	Absence of Violet ring	-
		Fehling's test	Absence of Red precipitate	-
11.	Tannin	Braymer's test	Absence of bluish green colour	-
		+ Gelatin test	Absence of white precipitate	-
		10% NaOH test	Absence of emulsion	-
12.	Saponins	Sample Shaken with water	Presence of foam	+

13.	Cardiac glycosides	+ Baljet reagent	Absence of yellow orange colour	-
		Bromine water test	Absence of yellow precipitate	-
		Keller killani test	Absence of brown ring	-
14.	Glycoside's test			-
		Aq. NaOH test	yellow coloured solution	-
15.	Coumarins	10% NaOH + CHCl ₃	Absence of yellow colour	-
16.	Volatile oils	Fluorescence test	Absence Pinkish fluorescence	-

+Present - Absent

THIN LAYER CHROMATOGRAPHY (TLC)

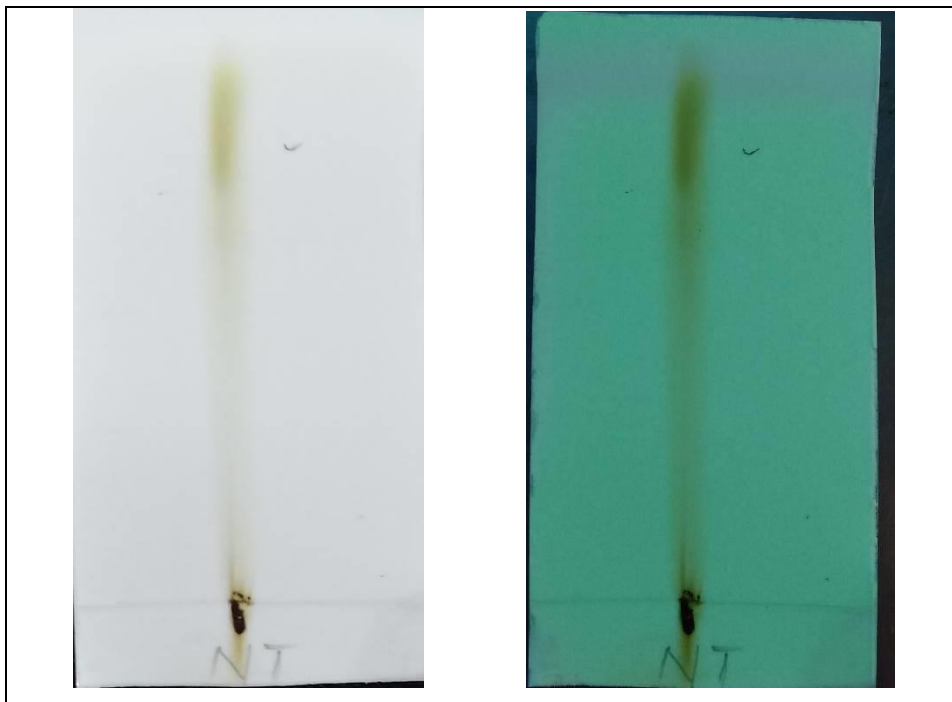
$$\text{Rf Value Formula} = \frac{\text{Distance travelled by the compound in cm}}{\text{Distance travelled by the solvent front in cm}}$$

$$= 4.4/5.5$$

$$= 0.8$$

The TLC results of NT sample RF values-

Thin layer chromatography		
S. No	Name of test samples	Rf values
1.	Ethanollic extract of <i>ABELMOSCHUS ESCULENTUS</i>	0.8



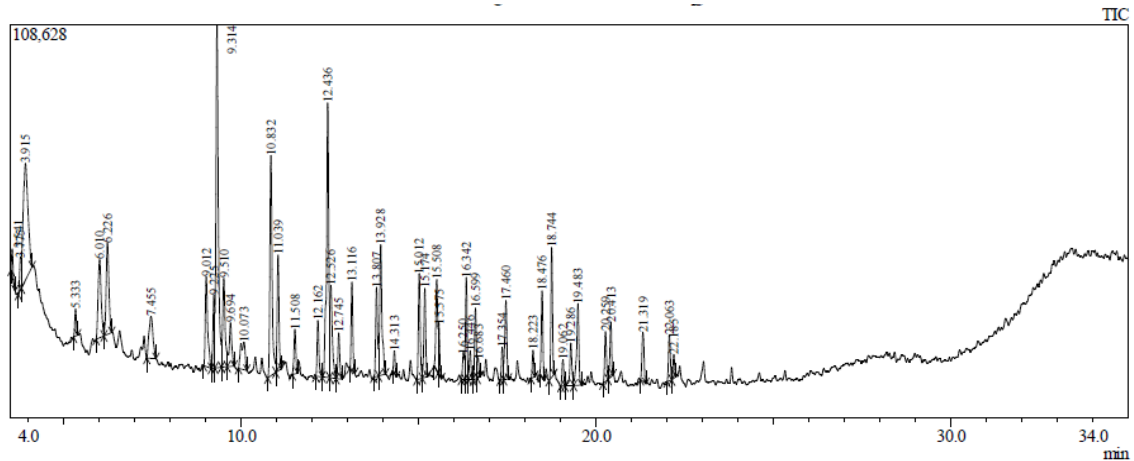
GAS CHROMATOGRAPHY MASS SPECTROSCOPY

Sample Information

Sample nam: Ethanollic extract of *Abelmoshus esculentus*

Vial: 1

Injection volume: 1.00



Peak#	R.Time	Area	Height	Name
1	3.541	19366	7464	Acetic acid, pentyl ester
2	3.775	32230	8869	p-Xylene
3	3.915	300323	32262	2,5-Dihydroxybenzaldehyde, 2TMS derivative
4	5.333	22877	7456	Pentadecafluorooctanoic acid, heptyl ester
5	6.010	132323	21586	2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS
6	6.226	136311	25202	2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS
7	7.455	92425	11550	3-Heptafluorobutyroxypentadecane
8	9.012	119094	24747	Pentasiloxane, dodecamethyl-
9	9.225	65880	20197	Cyclohexasiloxane, dodecamethyl-
10	9.314	444434	94702	Cyclohexasiloxane, dodecamethyl-
11	9.510	117575	24509	Cyclopentasiloxane, decamethyl-
12	9.694	63624	12054	4-Amino-5-cyclohexyl-4H-1,2,4-triazol-3-yl hydrosulfide, 2TMS derivative
13	10.073	64198	7570	Octadecane-1,2-diol, 2TMS derivative
14	10.832	269412	60838	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-
15	11.039	114010	31938	Cyclohexasiloxane, dodecamethyl-
16	11.508	42464	12297	Cyclohexasiloxane, dodecamethyl-
17	12.162	55853	15415	3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
18	12.436	340853	75823	3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
19	12.526	114598	25509	Hexasiloxane, tetradecamethyl-
20	12.745	46464	12611	1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsilyloxy) hexasiloxane
21	12.745	77865	24355	2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative
22	13.807	94158	24593	1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsilyloxy) hexasiloxane
23	13.928	163418	36014	Cycloheptasiloxane, tetradecamethyl-
24	14.313	17355	6171	Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-bis[(trimethylsilyloxy)-
25	15.012	106156	29006	2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative
26	15.174	87265	24577	Bis(heptamethylcyclotetrasiloxane)siloxane
27	15.508	93221	25072	Diethyl Phthalate
28	15.575	33929	13807	Bis(heptamethylcyclotetrasiloxane)siloxane
29	16.250	29963	6951	Pyrogallol, 3TBDMS derivative
30	16.342	90123	28101	Cyclooctasiloxane, hexadecamethyl-
31	16.446	25819	7866	N-(Trifluoroacetyl)-N,O,O'-tetrakis(trimethylsilyl) norepinephrine
32	16.599	66619	19520	n-Pentadecanol
33	16.683	14418	4951	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl-
34	17.354	30762	8876	Pyrogallol, 3TBDMS derivative
35	17.460	87567	21721	2-(2',4',4',6',6',8',8'-Heptamethyltetrasiloxan-2'-yloxy)-2,4,4,6,6,8,8,10,10-nonan
36	18.223	22373	7540	Decane, 3,7-dimethyl-
37	18.476	76057	23838	Heptasiloxane, hexadecamethyl-

38	18.744	112231	35860	Neophytadiene
39	19.062	22023	7255	3-Methylene-7,11-dimethyl-1-dodecene
40	19.286	50296	11716	1,9-Nonanediol
41	19.483	96806	22546	N-(Trifluoroacetyl)-N,O,O', O"-tetrakis (trimethylsilyl) norepinephrine
42	20.259	49469	13785	n-Decanoic acid
43	20.413	51818	15113	Heptasiloxane, hexadecamethyl-
44	21.319	49224	13610	N-(Trifluoroacetyl)-N,O,O',O"-tetrakis (trimethylsilyl) norepinephrine
45	22.063	41396	12596	3-Methylene-7, 11-dimethyl-1-dodecene
46	22.185	20626	6558	Hexasiloxane, tetradecamethyl-
		4205271	984597	

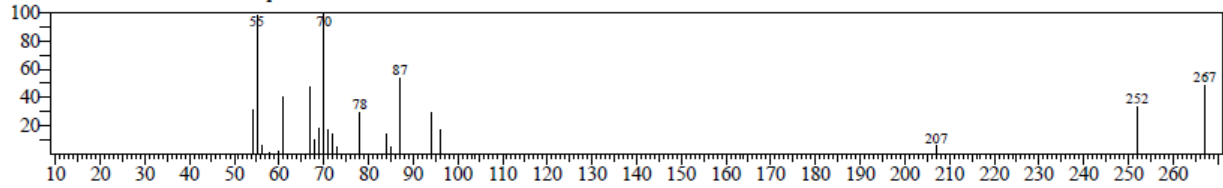
Library

<< Target >>

Line#:1 R.Time:3.542(Scan#:6) MassPeaks:22

RawMode:Averaged 3.533-3.550(5-7) BasePeak:70.10(2454)

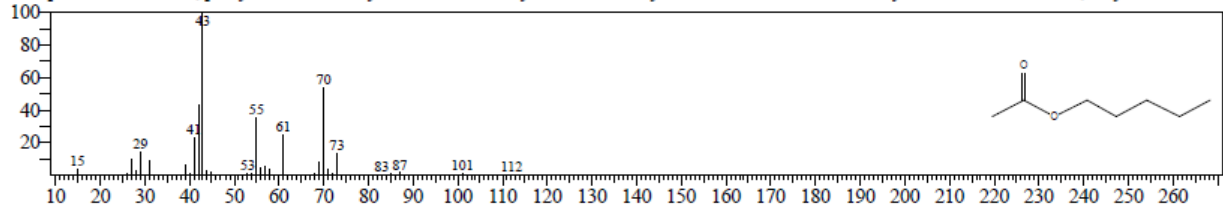
BG Mode:Calc. from Peak Group 1 - Event 1 Scan



Hit#:1 Entry:8685 Library:NIST20M1.lib

SI:67 Formula:C7H14O2 CAS:628-63-7 MolWeight:130 RetIndex:884

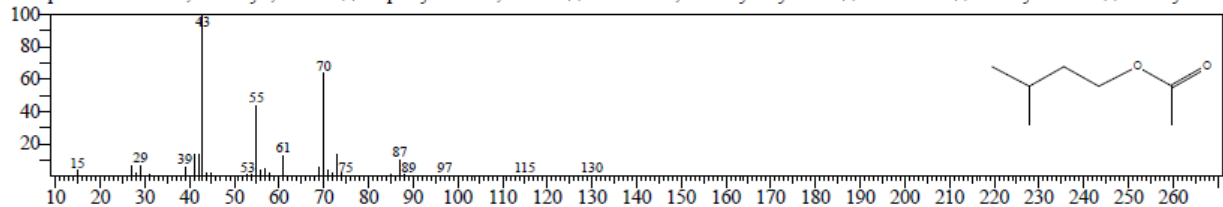
CompName:Acetic acid, pentyl ester \$\$ n-Amyl acetate \$\$ n-Pentyl acetate \$\$ Amyl acetate \$\$ Bimenoel \$\$ Pentyl acetate \$\$ Acetic acid, amyl ester \$\$ An



Hit#:2 Entry:8673 Library:NIST20M1.lib

SI:66 Formula:C7H14O2 CAS:123-92-2 MolWeight:130 RetIndex:820

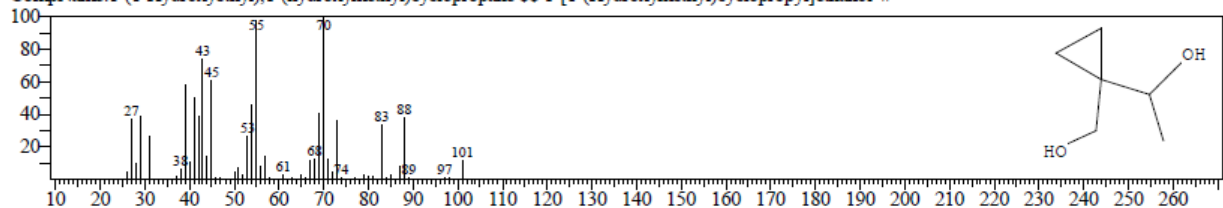
CompName:1-Butanol, 3-methyl-, acetate \$\$ Isopentyl alcohol, acetate \$\$ Acetic acid, 3-methylbutyl ester \$\$ Banana oil \$\$ Isoamyl acetate \$\$ Isoamyl etha



Hit#:3 Entry:4893 Library:NIST20M1.lib

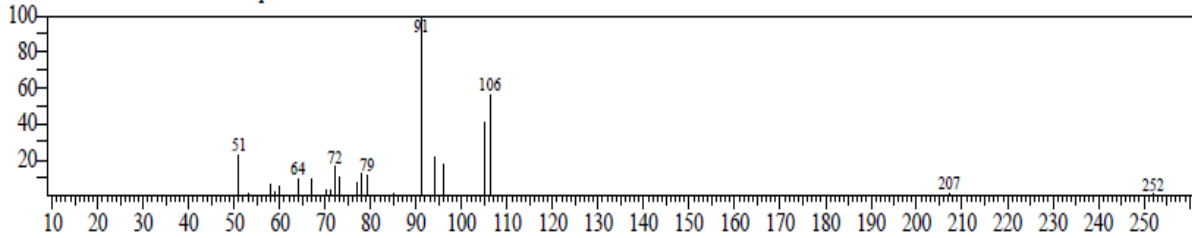
SI:65 Formula:C6H12O2 CAS:73959-42-9 MolWeight:116 RetIndex:999

CompName:1-(1-Hydroxyethyl),1-(hydroxymethyl)cyclopropane \$\$ 1-[1-(Hydroxymethyl)cyclopropyl]ethanol #

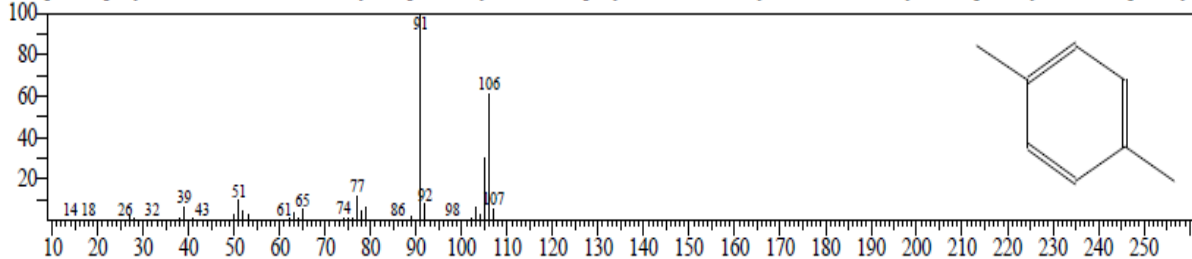


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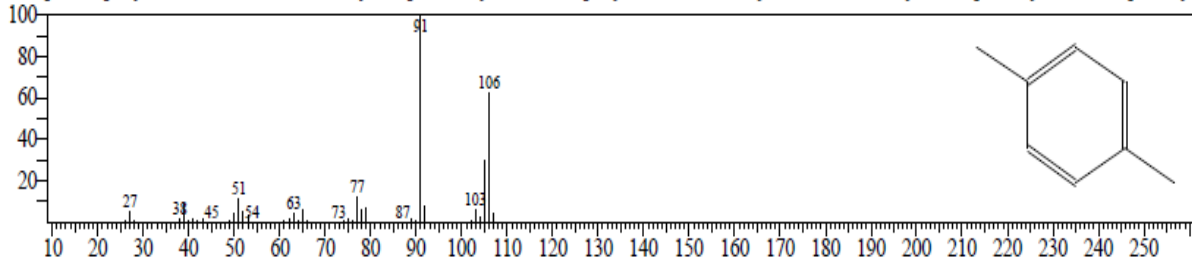
Line#:2 R.Time:3.775(Scan#:34) MassPeaks:22
 RawMode:Averaged 3.767-3.783(33-35) BasePeak:91.10(3542)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



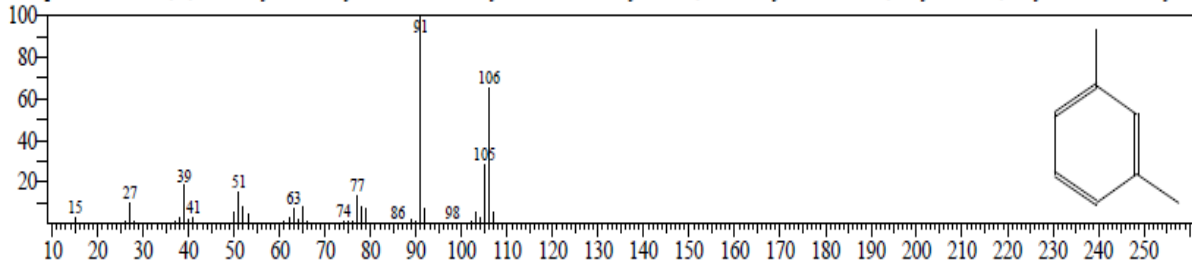
Hit#1 Entry:2905 Library:NIST20R.lib
 SI:74 Formula:C8H10 CAS:106-42-3 MolWeight:106 RetIndex:907
 CompName:p-Xylene \$\$ Benzene, 1,4-dimethyl- \$\$ p-Dimethylbenzene \$\$ p-Xylol \$\$ 1,4-Dimethylbenzene \$\$ 1,4-Xylene \$\$ p-Methyltoluene \$\$ para-Xyl



Hit#2 Entry:2906 Library:NIST20R.lib
 SI:74 Formula:C8H10 CAS:106-42-3 MolWeight:106 RetIndex:907
 CompName:p-Xylene \$\$ Benzene, 1,4-dimethyl- \$\$ p-Dimethylbenzene \$\$ p-Xylol \$\$ 1,4-Dimethylbenzene \$\$ 1,4-Xylene \$\$ p-Methyltoluene \$\$ para-Xyl

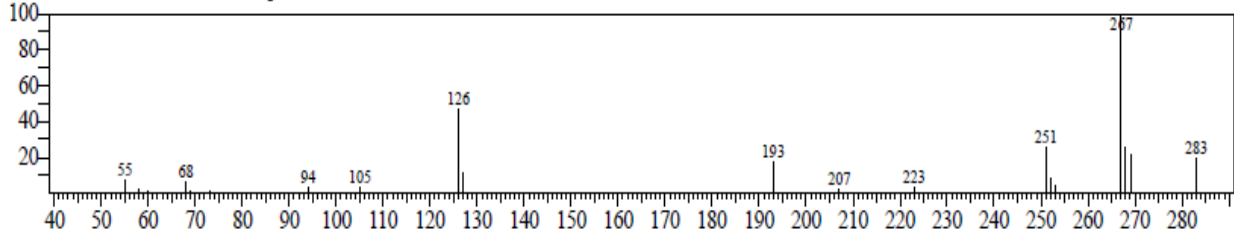


Hit#3 Entry:2901 Library:NIST20R.lib
 SI:74 Formula:C8H10 CAS:108-38-3 MolWeight:106 RetIndex:907
 CompName:Benzen, 1,3-dimethyl- \$\$ m-Xylene \$\$ m-Dimethylbenzene \$\$ m-Xylol \$\$ 1,3-Dimethylbenzene \$\$ 1,3-Xylene \$\$ 2,4-Xylene \$\$ m-Methyltol

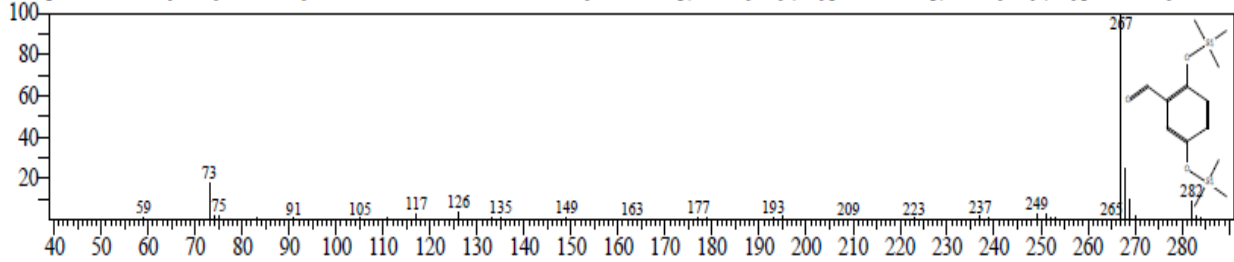


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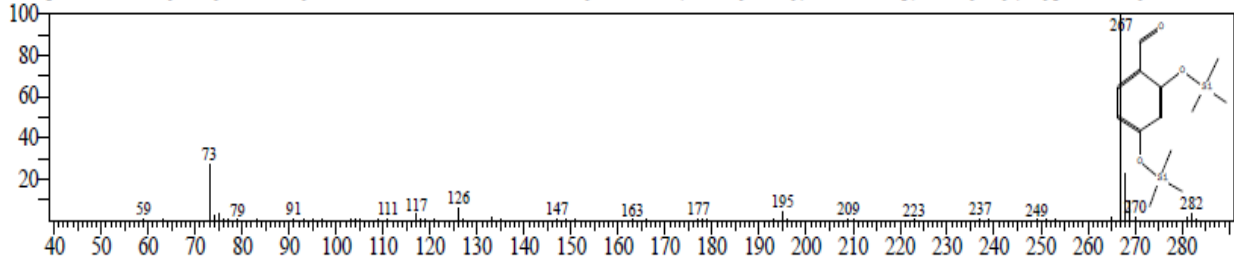
Line#3 R.Time:3.917(Scan#:51) MassPeaks:21
 RawMode:Averaged 3.908-3.925(50-52) BasePeak:267.05(10380)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



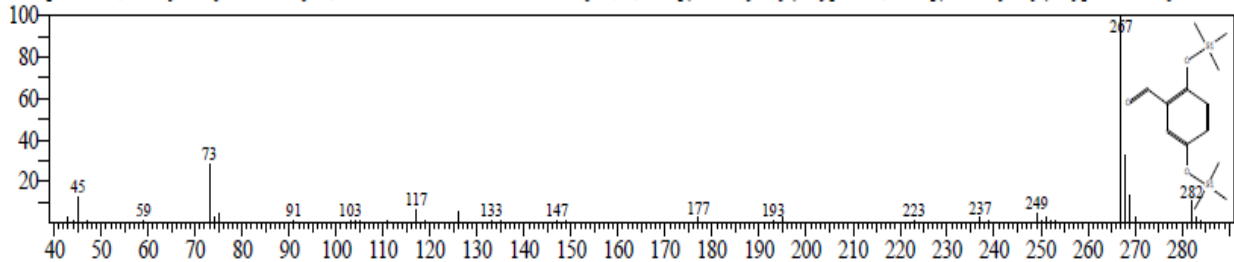
Hit#1 Entry:34191 Library:NIST20R.lib
 SI:71 Formula:C13H22O3Si2 CAS:56114-69-3 MolWeight:282 RetIndex:1578
 CompName:2,5-Dihydroxybenzaldehyde, 2TMS derivative \$\$ Benzaldehyde, 2,5-bis[(trimethylsilyl)oxy]- \$\$ 2,5-Bis[(trimethylsilyl)oxy]benzaldehyde #



Hit#2 Entry:34193 Library:NIST20R.lib
 SI:71 Formula:C13H22O3Si2 CAS:33617-38-8 MolWeight:282 RetIndex:1578
 CompName:2,4-Dihydroxybenzaldehyde, 2TMS derivative \$\$ Benzaldehyde, 2,4-bis(trimethylsilyloxy)- \$\$ 2,4-Bis[(trimethylsilyl)oxy]benzaldehyde #

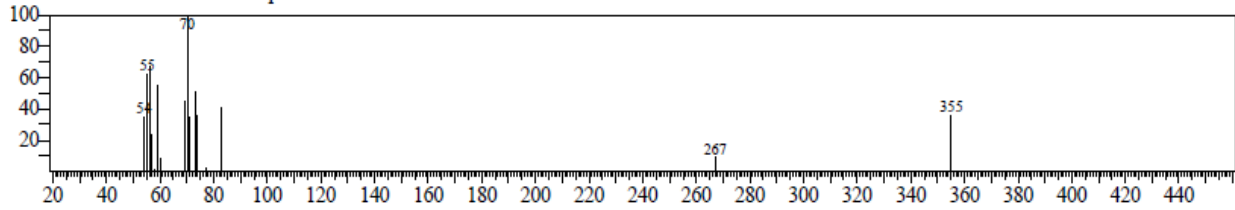


Hit#3 Entry:34192 Library:NIST20R.lib
 SI:70 Formula:C13H22O3Si2 CAS:56114-69-3 MolWeight:282 RetIndex:1578
 CompName:2,5-Dihydroxybenzaldehyde, 2TMS derivative \$\$ Benzaldehyde, 2,5-bis[(trimethylsilyl)oxy]- \$\$ 2,5-Bis[(trimethylsilyl)oxy]benzaldehyde #

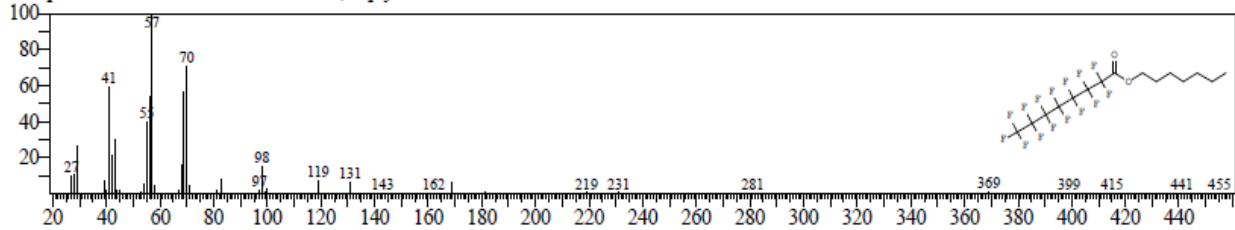


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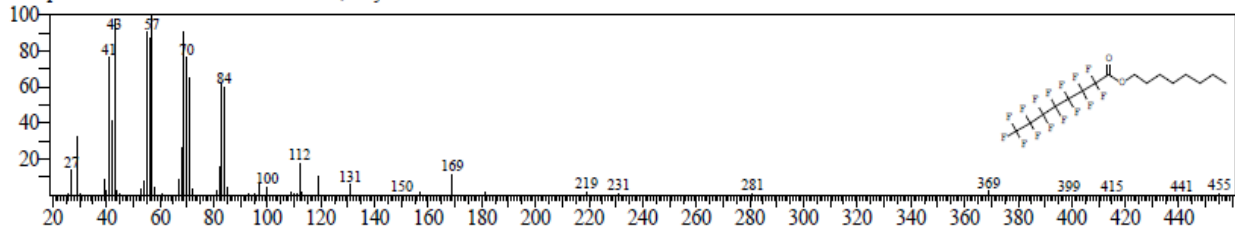
Line#:4 R Time:5.333(Scan#:221) MassPeaks:16
 RawMode:Averaged 5.325-5.342(220-222) BasePeak:70.10(2012)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



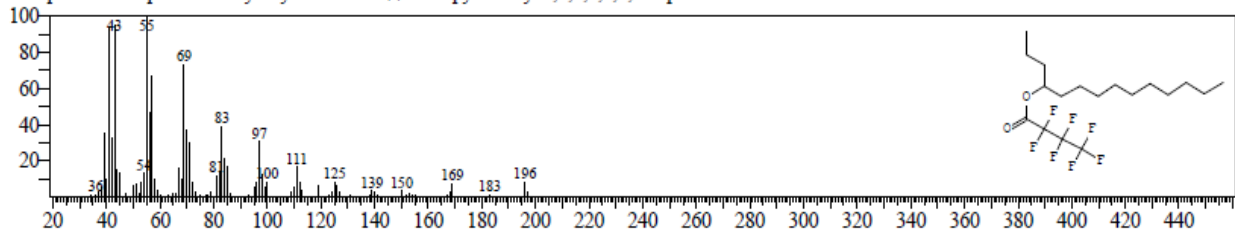
Hit#:1 Entry:36189 Library:NIST20M2.lib
 SI:62 Formula:C15H15F15O2 CAS:0-00-0 MolWeight:512 RefIndex:682
 CompName: Pentadecafluorooctanoic acid, heptyl ester



Hit#:2 Entry:37843 Library:NIST20M2.lib
 SI:62 Formula:C16H17F15O2 CAS:0-00-0 MolWeight:526 RefIndex:781
 CompName: Pentadecafluorooctanoic acid, octyl ester

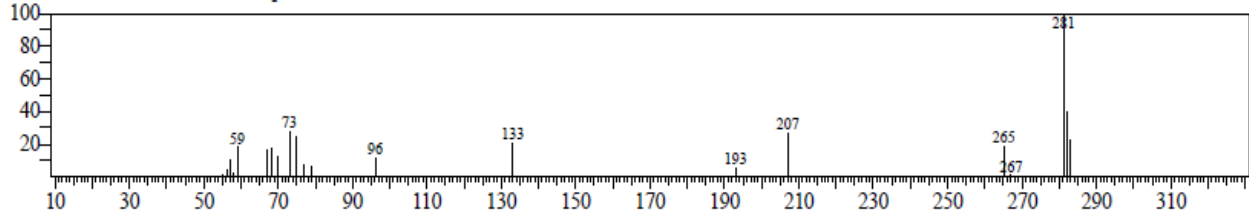


Hit#:3 Entry:5439 Library:NIST20M2.lib
 SI:60 Formula:C18H29F7O2 CAS:0-00-0 MolWeight:410 RefIndex:1470
 CompName: 4-Heptafluorobutyroxytetradecane \$\$ 1-Propylundecyl 2,2,3,3,4,4,4-heptafluorobutanoate #

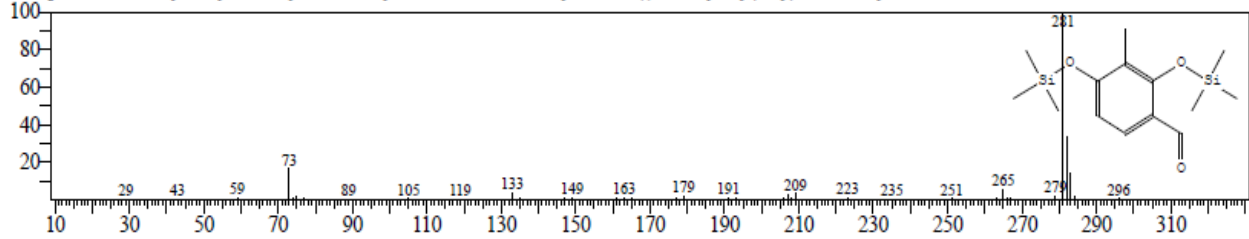


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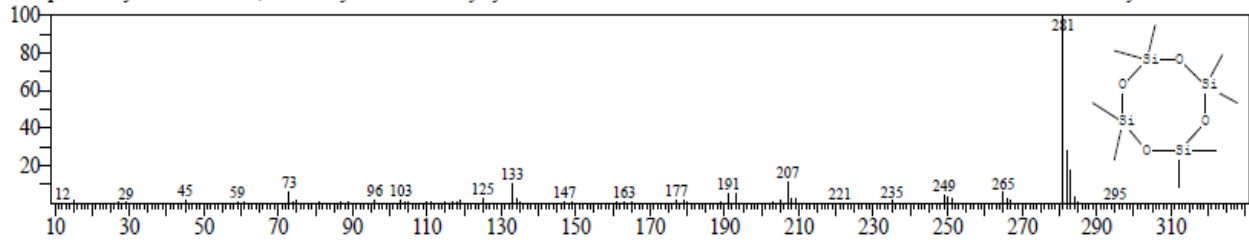
Line# 5 R Time: 6.008(Scan#: 302) MassPeaks: 21
 RawMode: Averaged 6.000-6.017(301-303) BasePeak: 281.10(6037)
 BG Mode: Calc. from Peak Group 1 - Event 1 Scan



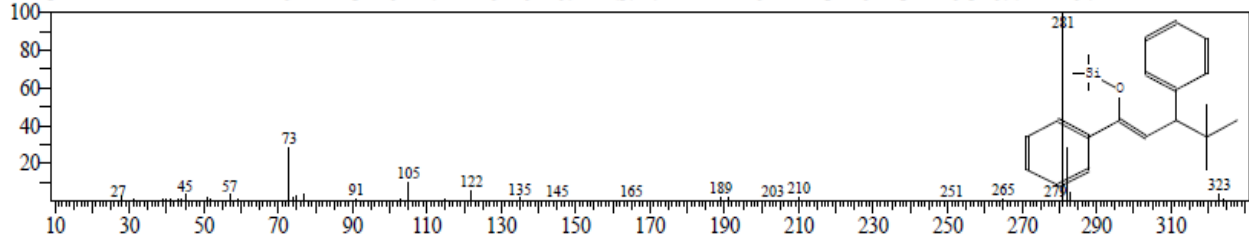
Hit# 1 Entry: 158101 Library: NIST20M1.lib
 SI: 70 Formula: C₁₄H₂₄O₃Si₂ CAS: 0-00-0 MolWeight: 296 RefIndex: 1691
 CompName: 2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS \$ 3-Methyl-2,4-bis((trimethylsilyloxy)benzaldehyde



Hit# 2 Entry: 157669 Library: NIST20M1.lib
 SI: 69 Formula: C₈H₂₄O₄Si₄ CAS: 556-67-2 MolWeight: 296 RefIndex: 827
 CompName: Cyclotetrasiloxane, octamethyl- \$ Oktamethylcyclotetrasiloxan \$ NUC Silicone VS 7207 \$ CO9810 \$ O9810 \$ Octamethyltetrasiloxane

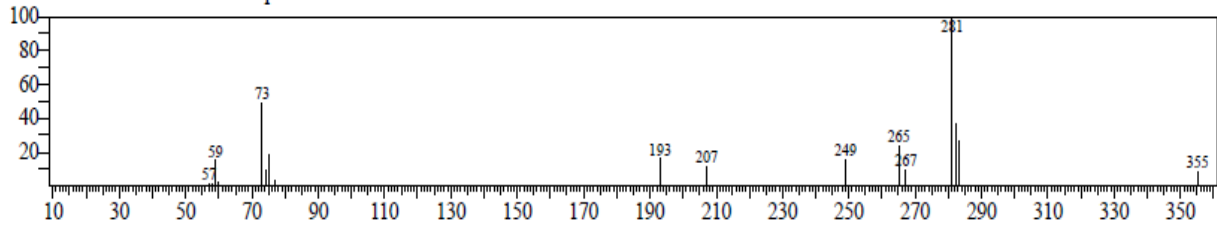


Hit# 3 Entry: 207663 Library: NIST20M1.lib
 SI: 69 Formula: C₂₂H₃₀O₃Si CAS: 0-00-0 MolWeight: 338 RefIndex: 2184
 CompName: 1-Pentene, 4,4-dimethyl-1,3-diphenyl-1-(trimethylsilyloxy)- \$ ((1Z)-4,4-Dimethyl-1,3-diphenyl-1-pentenyl)oxy(trimethyl)silane #

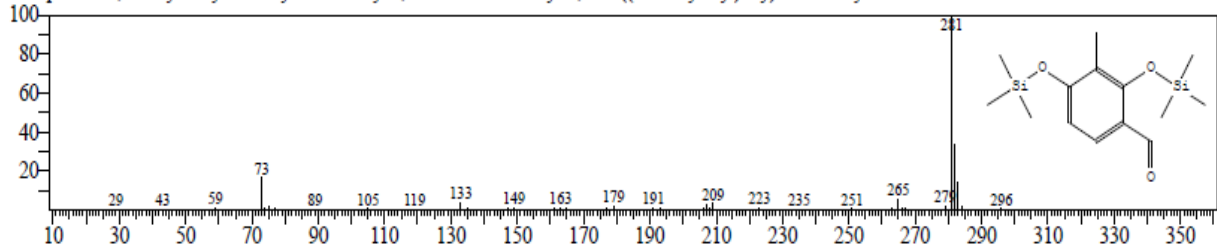


<< Target >>

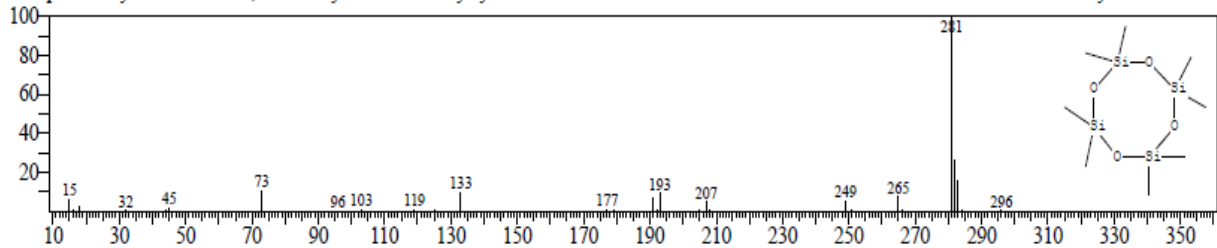
Line#:6 R.Time:6.225(Scan#:328) MassPeaks:17
 RawMode:Averaged 6.217-6.233(327-329) BasePeak:281.10(8484)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



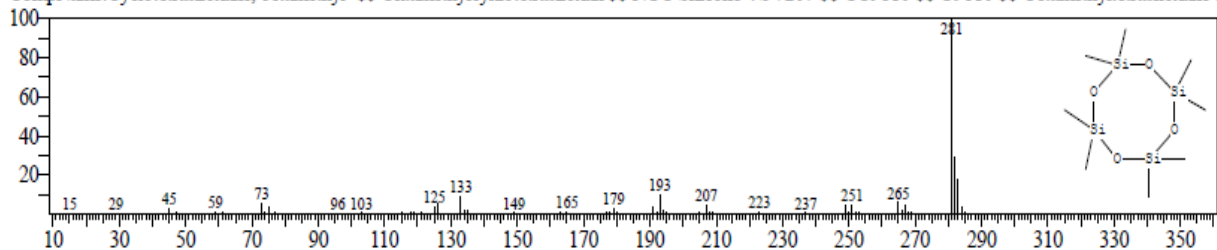
Hit#:1 Entry:158101 Library:NIST20M1.lib
 SI:76 Formula:C14H24O3Si2 CAS:0-00-0 MolWeight:296 RetIndex:1691
 CompName:2,4-Dihydroxy-3-methylbenzaldehyde, 2TMS \$ 3-Methyl-2,4-bis(trimethylsilyloxy)benzaldehyde



Hit#:2 Entry:35515 Library:NIST20R.lib
 SI:75 Formula:C8H24O4Si4 CAS:556-67-2 MolWeight:296 RetIndex:827
 CompName:Cyclotetrasiloxane, octamethyl- \$ Oktamethylcyklotetrasiloxan \$ NUC Silicone VS 7207 \$ CO9810 \$ O9810 \$ Octamethyltetrasiloxane !

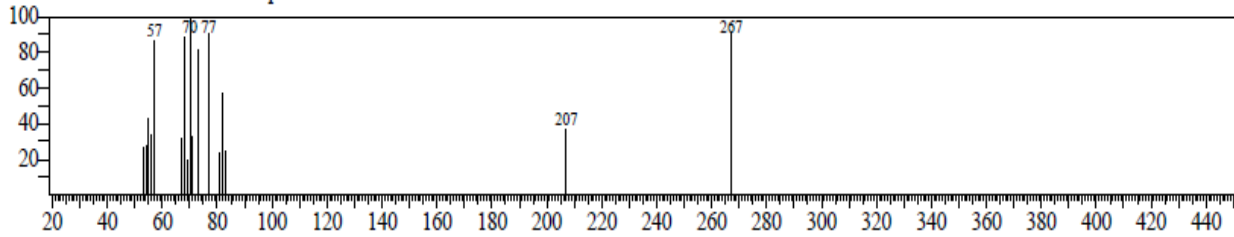


Hit#:3 Entry:35514 Library:NIST20R.lib
 SI:75 Formula:C8H24O4Si4 CAS:556-67-2 MolWeight:296 RetIndex:827
 CompName:Cyclotetrasiloxane, octamethyl- \$ Oktamethylcyklotetrasiloxan \$ NUC Silicone VS 7207 \$ CO9810 \$ O9810 \$ Octamethyltetrasiloxane !

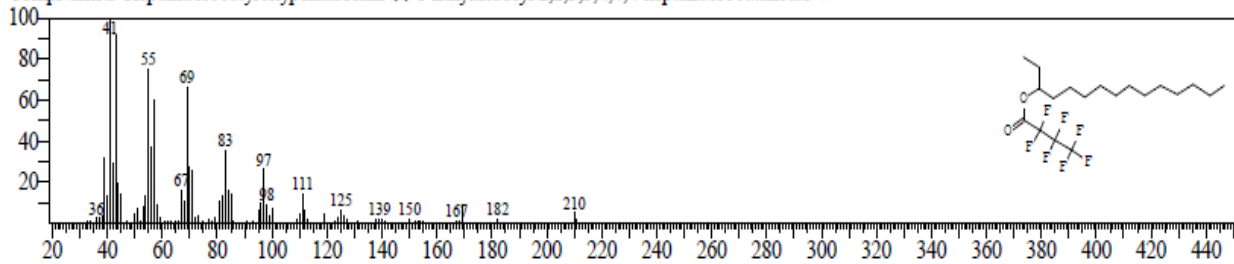


<<Target>>

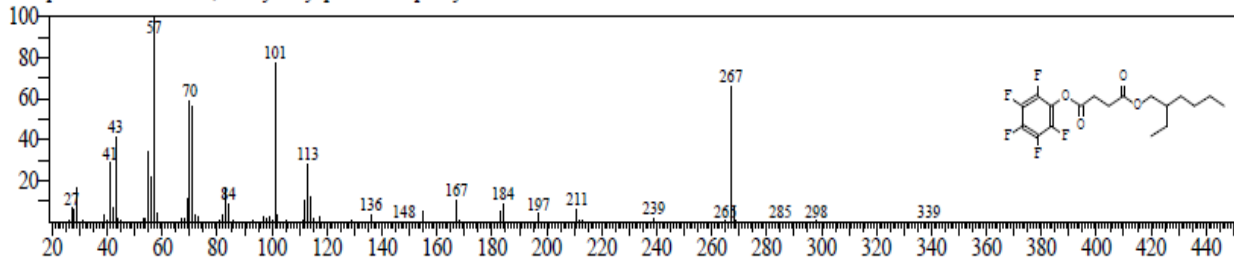
Line#:7 R.Time:7.458(Scan#:476) MassPeaks:17
 RawMode:Averaged 7.450-7.467(475-477) BasePeak:70.10(1406)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



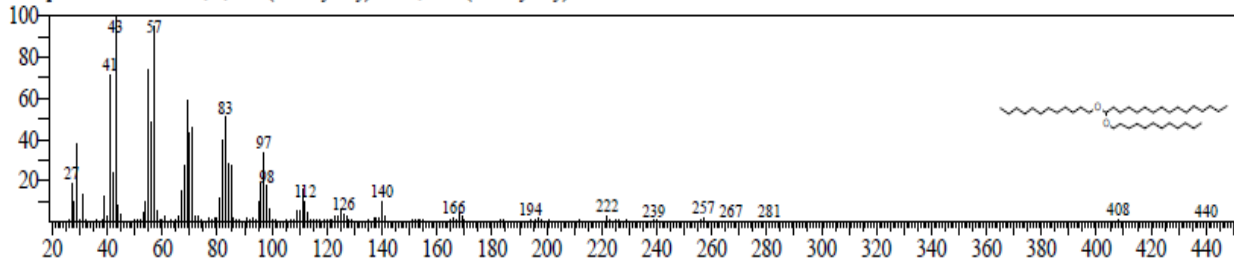
Hit#:1 Entry:12380 Library:NIST20M2.lib
 SI:62 Formula:C19H31F7O2 CAS:0-00-0 MolWeight:424 RefIndex:1570
 CompName:3-Heptafluorobutyropyntadecane \$\$ 1-Ethyltridecyl 2,2,3,3,4,4,4-heptafluorobutanoate #



Hit#:2 Entry:257666 Library:NIST20M1.lib
 SI:62 Formula:C18H21F5O4 CAS:0-00-0 MolWeight:396 RefIndex:2032
 CompName:Succinic acid, 2-ethylhexyl pentafluorophenyl ester

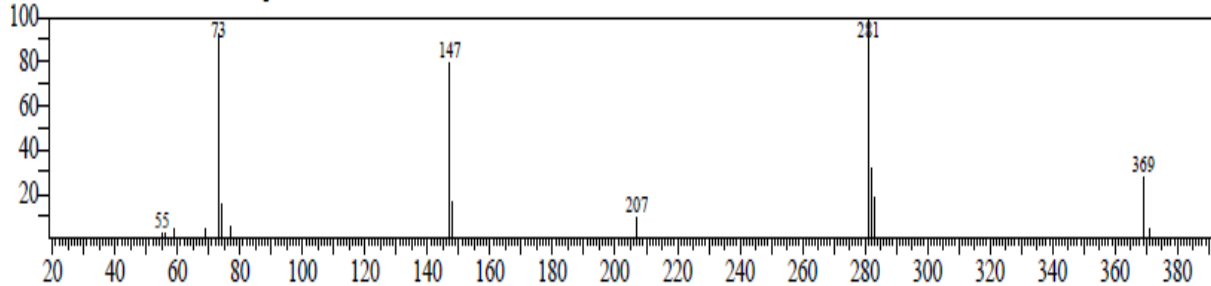


Hit#:3 Entry:42523 Library:NIST20M2.lib
 SI:60 Formula:C40H82O2 CAS:56554-64-4 MolWeight:594 RefIndex:4085
 CompName:Hexadecane, 1,1-bis(dodecyloxy)- \$\$ 1,1-Bis(dodecyloxy)hexadecane #

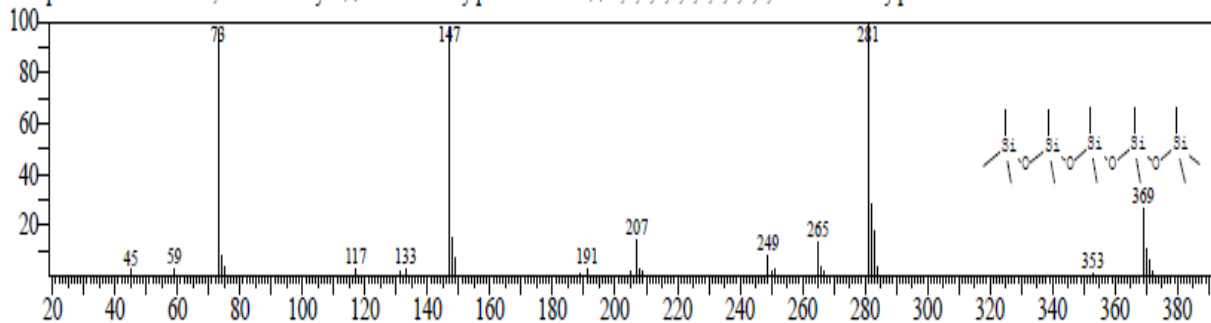


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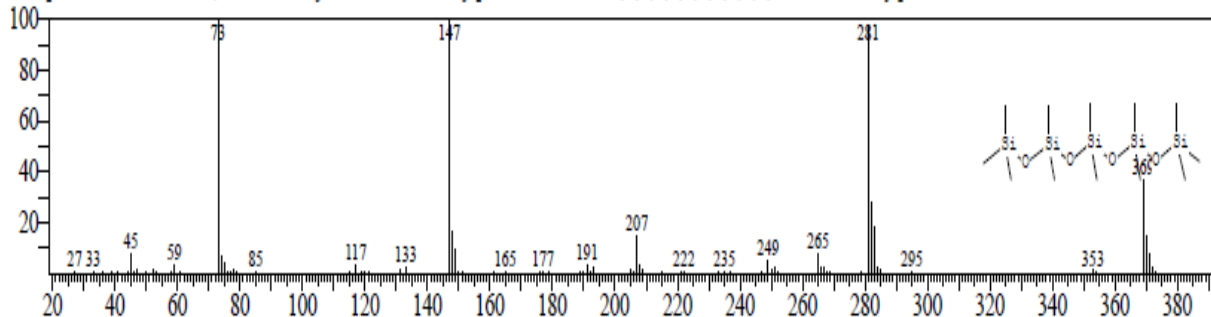
Line#:8 R.Time:9.008(Scan#:662) MassPeaks:16
 RawMode:Averaged 9.000-9.017(661-663) BasePeak:281.10(7855)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



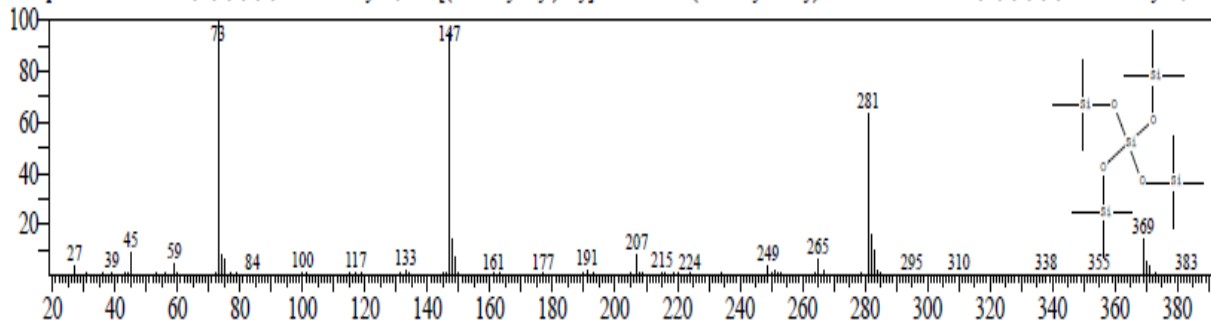
Hit#:1 Entry:40973 Library:NIST20R.lib
 SI:87 Formula:C₁₂H₃₆O₄Si₅ CAS:141-63-9 MolWeight:384 RetIndex:1068
 CompName:Pentasiloxane, dodecamethyl- \$\$ Dodecamethylpentasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,9-Dodecamethylpentasiloxane #



Hit#:2 Entry:40974 Library:NIST20R.lib
 SI:86 Formula:C₁₂H₃₆O₄Si₅ CAS:141-63-9 MolWeight:384 RetIndex:1068
 CompName:Pentasiloxane, dodecamethyl- \$\$ Dodecamethylpentasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,9-Dodecamethylpentasiloxane #

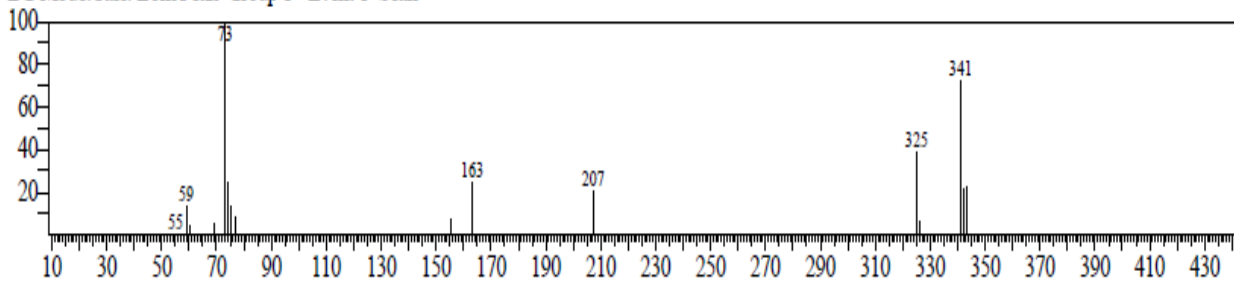


Hit#:3 Entry:249272 Library:NIST20M1.lib
 SI:84 Formula:C₁₂H₃₆O₄Si₅ CAS:3555-47-3 MolWeight:384 RetIndex:1068
 CompName:Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-bis[(trimethylsilyloxy)- \$\$ Tetrakis(trimethylsilyloxy)silane \$\$ Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-b

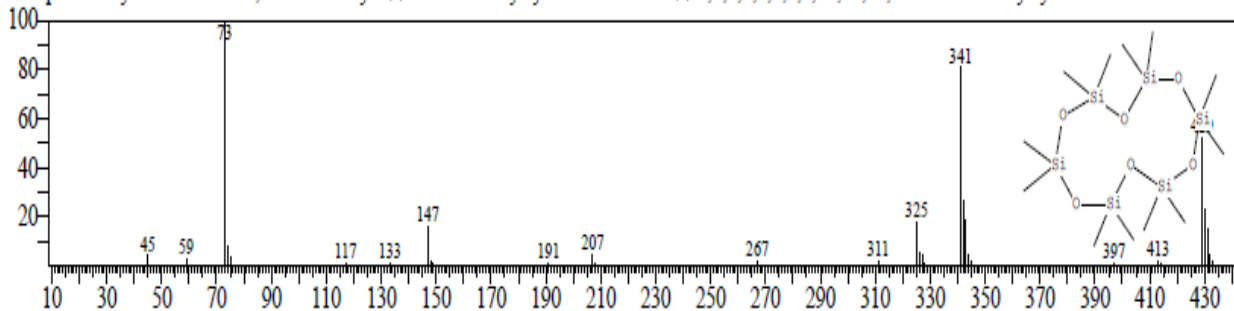


<<Target>>

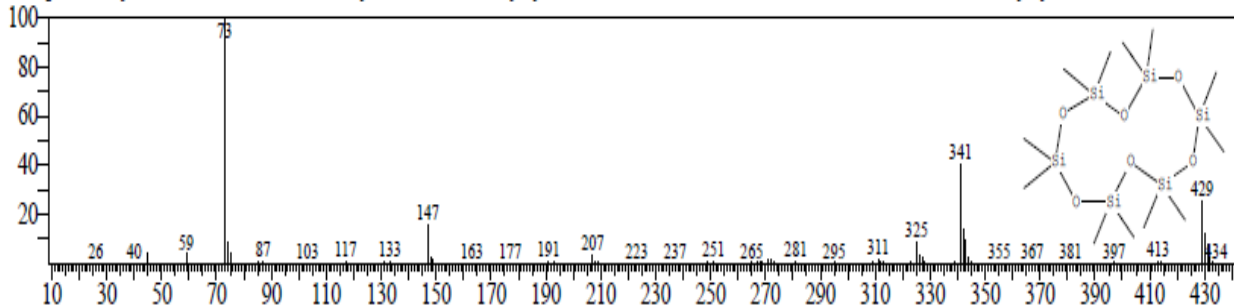
Line#:9 R.Time:9.225(Scan#:688) MassPeaks:16
 RawMode:Averaged 9.217-9.233(687-689) BasePeak:73.10(5516)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



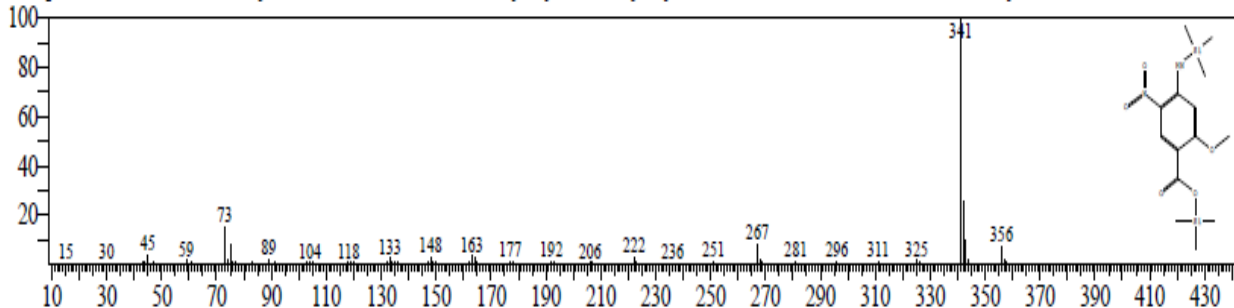
Hit#:1 Entry:42510 Library:NIST20R.lib
 SI:70 Formula:C12H36O6Si6 CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #



Hit#:2 Entry:42511 Library:NIST20R.lib
 SI:68 Formula:C12H36O6Si6 CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

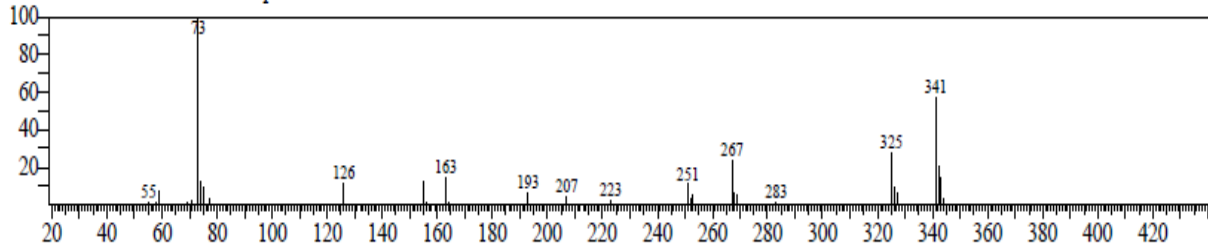


Hit#:3 Entry:225479 Library:NIST20M1.lib
 SI:67 Formula:C14H24N2O5Si2 CAS:0-00-0 MolWeight:356 RetIndex:2174
 CompName:4-Amino-2-methoxy-5-nitrobenzoic acid, N-trimethylsilyl-, trimethylsilyl ester \$\$ Benzoic acid, 4-amino-2-methoxy-5-nitro-, 2TMS

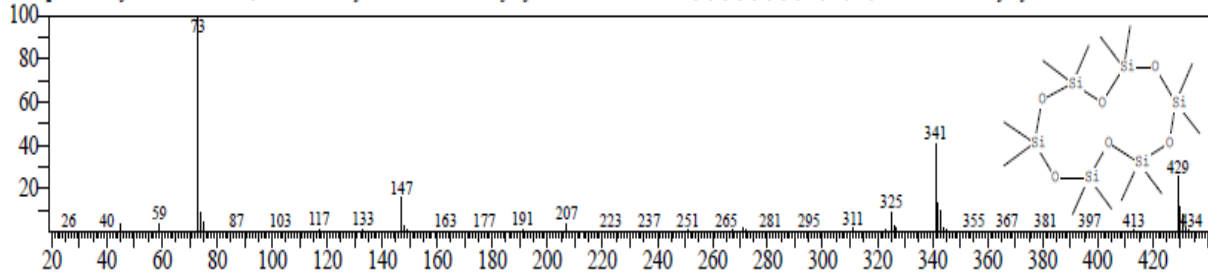


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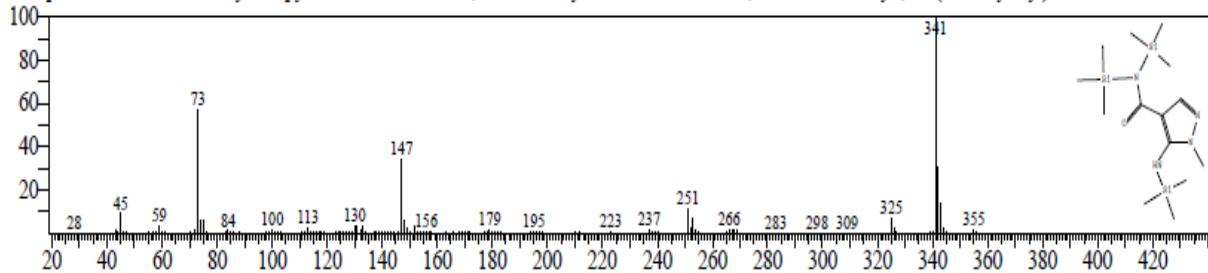
Line#:10 R.Time:9.317(Scan#:699) MassPeaks:31
 RawMode:Averaged 9.308-9.325(698-700) BasePeak:73.10(28298)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



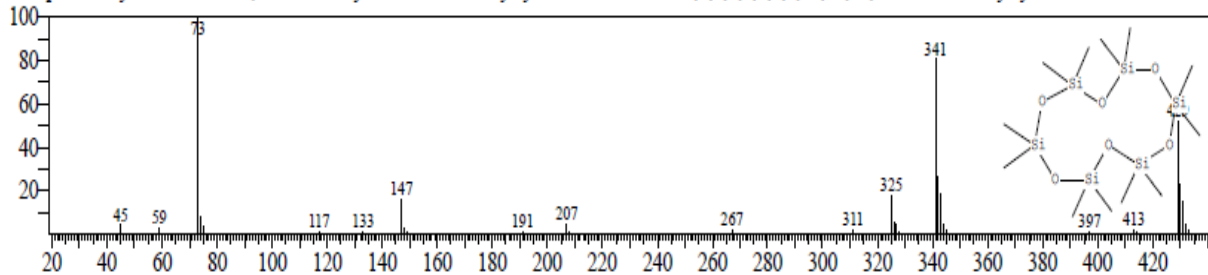
Hit#:1 Entry:42511 Library:NIST20R.lib
 SI:69 Formula:C12H36O6Si6 CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #



Hit#:2 Entry:225481 Library:NIST20M1.lib
 SI:68 Formula:C14H32N4OSi3 CAS:0-00-0 MolWeight:356 RetIndex:1819
 CompName:5-Amino-1-methyl-1H-pyrazole-4-carboxamide, 3TMS \$\$ Pyrazole-4-carboxamide, 5-amino-1-methyl-, tris(trimethylsilyl) derivative

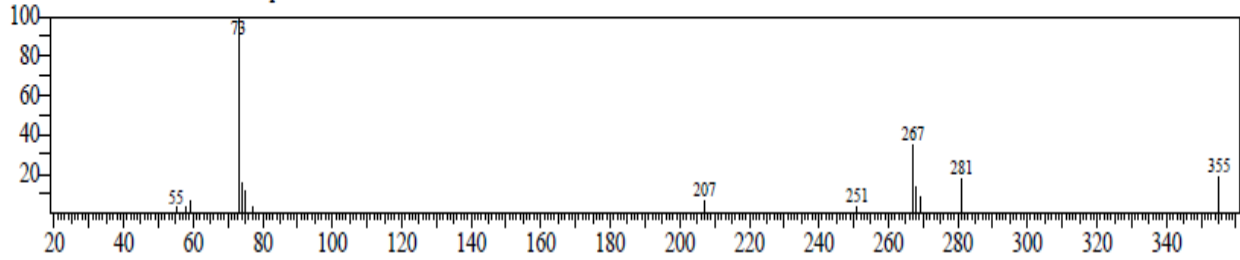


Hit#:3 Entry:42510 Library:NIST20R.lib
 SI:67 Formula:C12H36O6Si6 CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

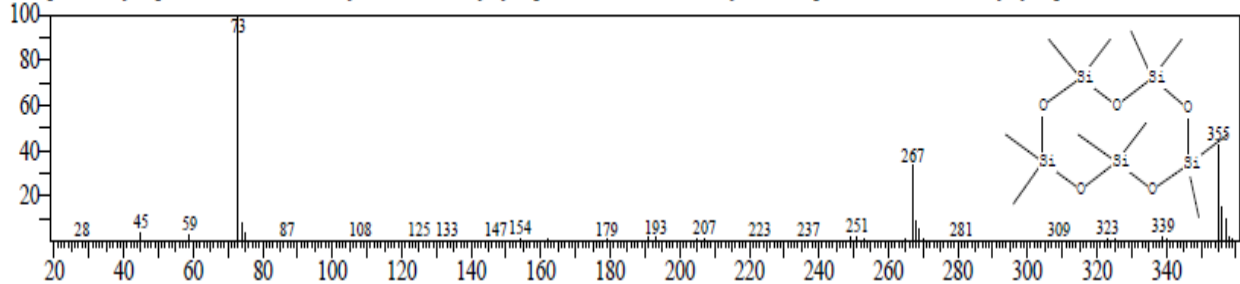


<< Target >>

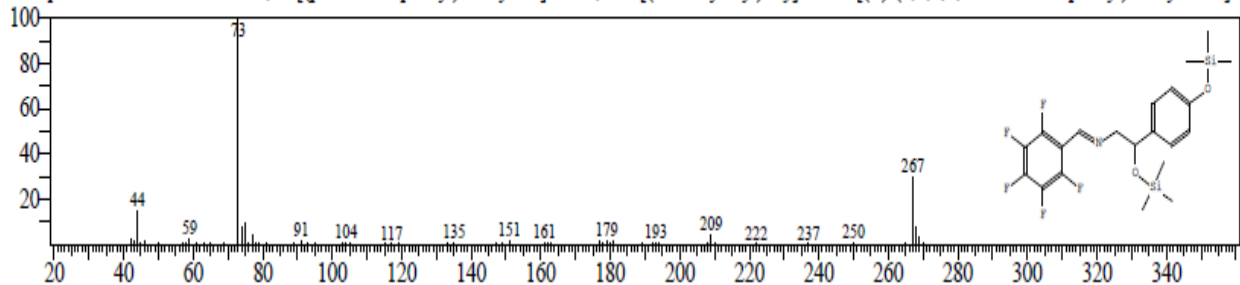
Line#:11 R Time:9.508(Scan#:722) MassPeaks:14
 RawMode:Averaged 9.500-9.517(721-723) BasePeak:73.05(10987)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



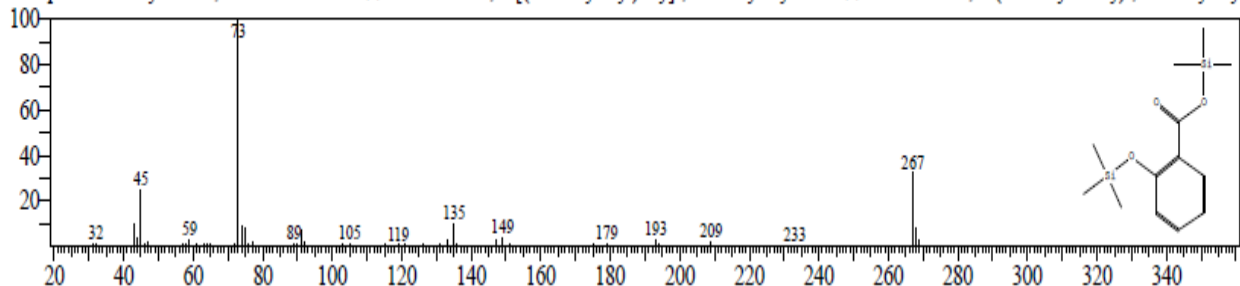
Hit#:1 Entry:40418 Library:NIST20R.lib
 SI:80 Formula:C10H30O5Si5 CAS:541-02-6 MolWeight:370 RetIndex:1034
 CompName:Cyclopentasiloxane, decamethyl- \$\$ Decamethylcyclopentasiloxane \$\$ Dimethylsiloxane pentamer \$\$ Dekamethylcyclopentasiloxan \$\$ CD377



Hit#:2 Entry:42945 Library:NIST20R.lib
 SI:78 Formula:C21H26F5NO2Si2 CAS:55429-85-1 MolWeight:475 RetIndex:2274
 CompName:Benzeethanamine, N-[(pentafluorophenyl)methylene]-. beta., 4-bis[(trimethylsilyl)oxy]- \$\$ N-[(E)-(2,3,4,5,6-Pentafluorophenyl)methylidene]-

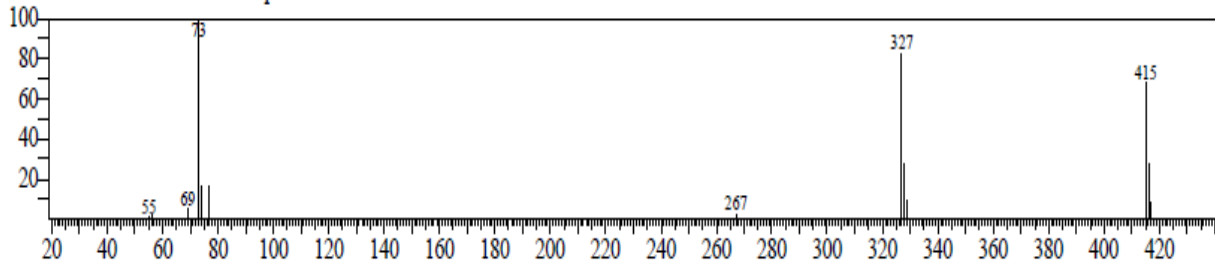


Hit#:3 Entry:34186 Library:NIST20R.lib
 SI:75 Formula:C13H22O3Si2 CAS:3789-85-3 MolWeight:282 RetIndex:1467
 CompName:Salicylic acid, 2TMS derivative \$\$ Benzoic acid, 2-[(trimethylsilyl)oxy]-, trimethylsilyl ester \$\$ Benzoic acid, o-(trimethylsilyloxy)-, trimethylsilyl



<< Target >>

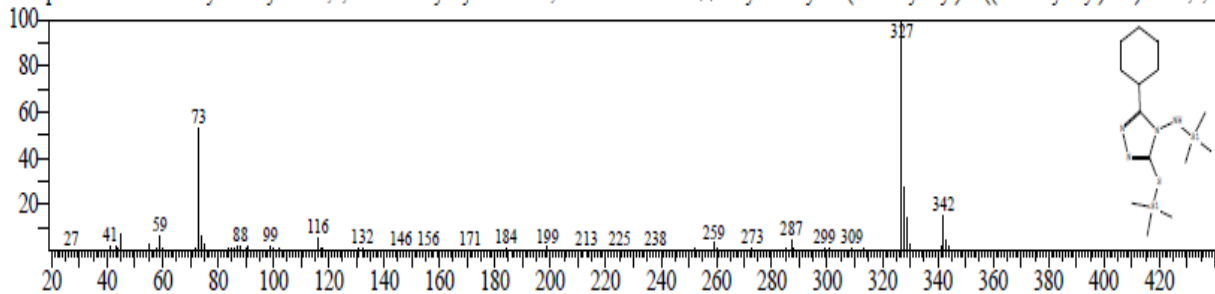
Line#:12 R.Time:9.692(Scan#:744) MassPeaks:14
 RawMode:Averaged 9.683-9.700(743-745) BasePeak:73.05(4207)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



Hit#1 Entry:211331 Library:NIST20M1.lib

SI:62 Formula:C14H30N4SSi2 CAS:0-00-0 MolWeight:342 RefIndex:2159

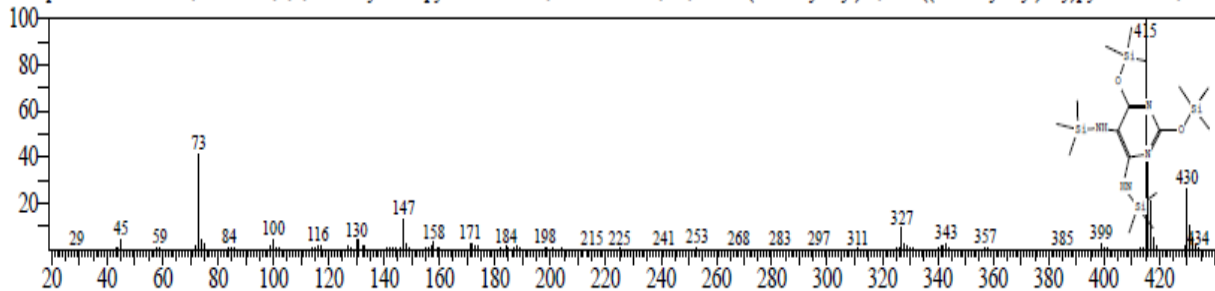
CompName:4-Amino-5-cyclohexyl-4H-1,2,4-triazol-3-yl hydrosulfide, 2TMS derivative



Hit#2 Entry:15273 Library:NIST20M2.lib

SI:62 Formula:C16H38N4O2Si4 CAS:0-00-0 MolWeight:430 RefIndex:2105

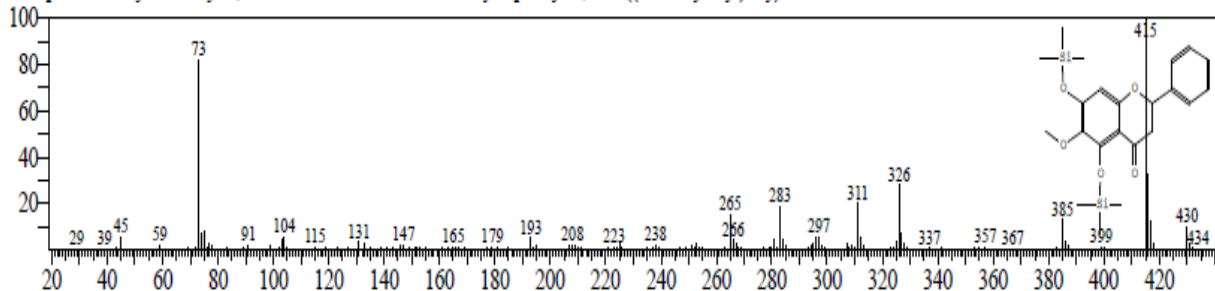
CompName:6-Amino-2,4-dioxo-1,2,3,4-tetrahydro-5-pyrimidinamine, 4TMS



Hit#3 Entry:15410 Library:NIST20M2.lib

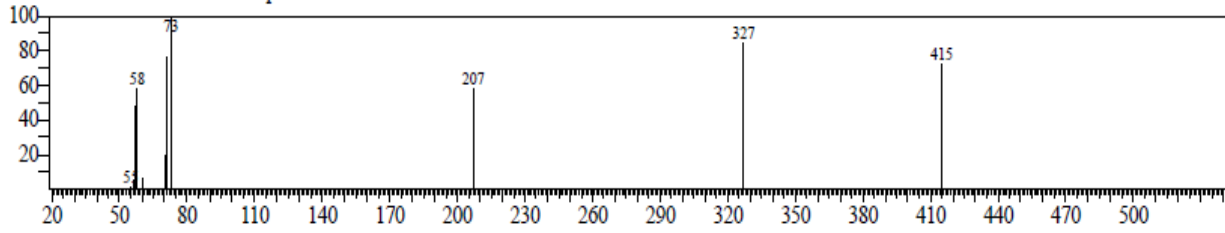
SI:61 Formula:C22H30O5Si2 CAS:0-00-0 MolWeight:430 RefIndex:2746

CompName:Dihydrooroxynin, 2TMS derivative

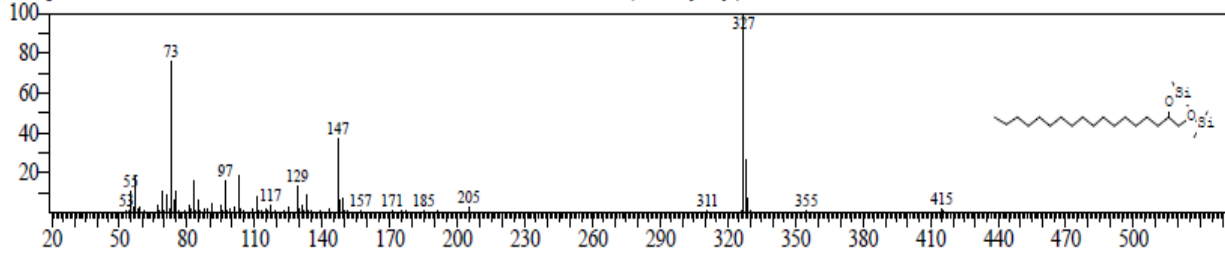


<< Target >>

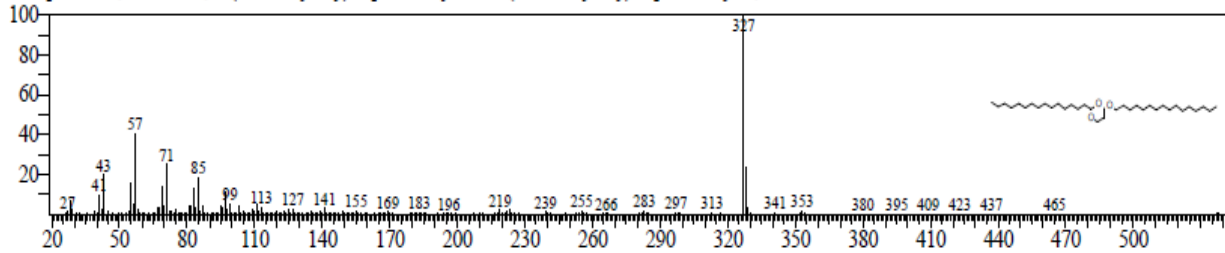
Line#:13 R.Time:10.075(Scan#:790) MassPeaks:11
 RawMode:Averaged 10.067-10.083(789-791) BasePeak:73.05(1814)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



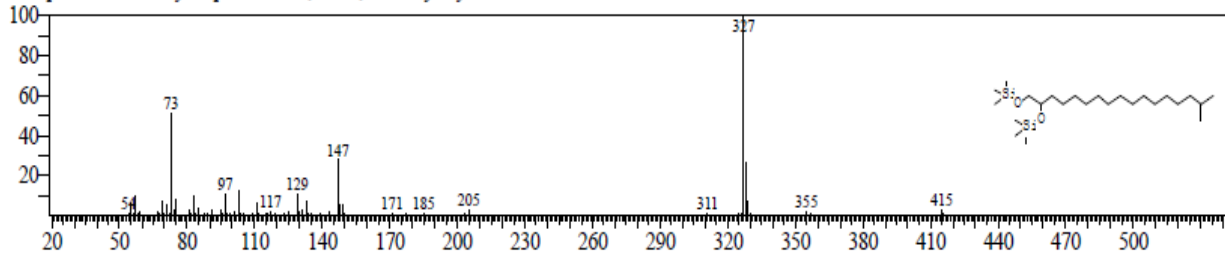
Hit#:1 Entry:15547 Library:NIST20M2.lib
 SI:52 Formula:C₂₄H₅₄O₂Si₂ CAS:0-00-0 MolWeight:430 RetIndex:2315
 CompName:Octadecane-1,2-diol, 2TMS derivative \$\$ Octadecane-1,2-diol, bis(trimethylsilyl) ether



Hit#:2 Entry:39075 Library:NIST20M2.lib
 SI:51 Formula:C₃₅H₇₀O₃ CAS:56599-40-7 MolWeight:538 RetIndex:3778
 CompName:1,3-Dioxane, 4-(hexadecyloxy)-2-pentadecyl- \$\$ 4-(Hexadecyloxy)-2-pentadecyl-1,3-dioxane #

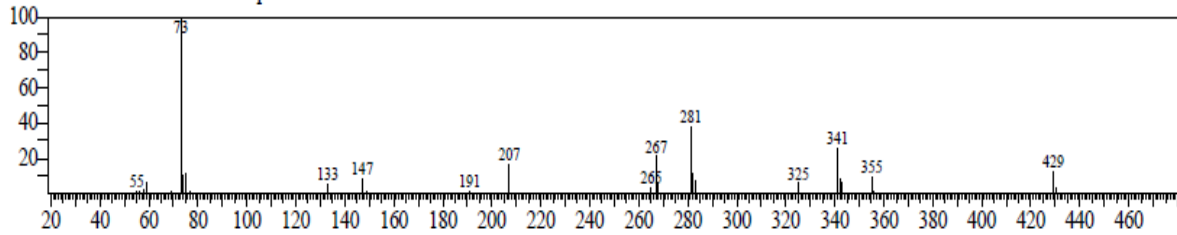


Hit#:3 Entry:15548 Library:NIST20M2.lib
 SI:51 Formula:C₂₄H₅₄O₂Si₂ CAS:0-00-0 MolWeight:430 RetIndex:2250
 CompName:16-Methyl-heptadecane-1,2-diol, trimethylsilyl ether

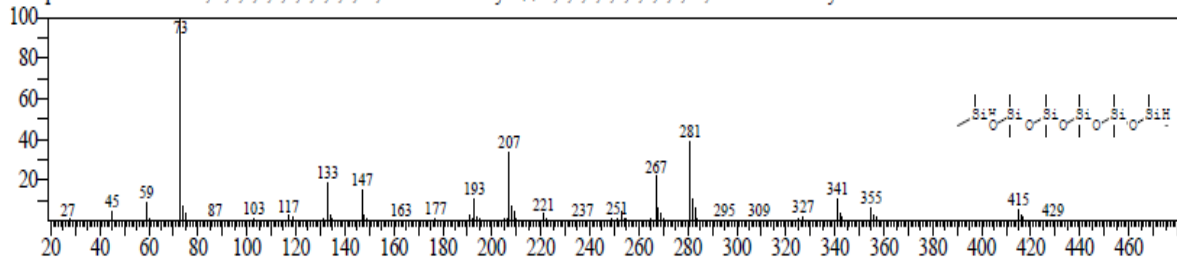


<< Target >>

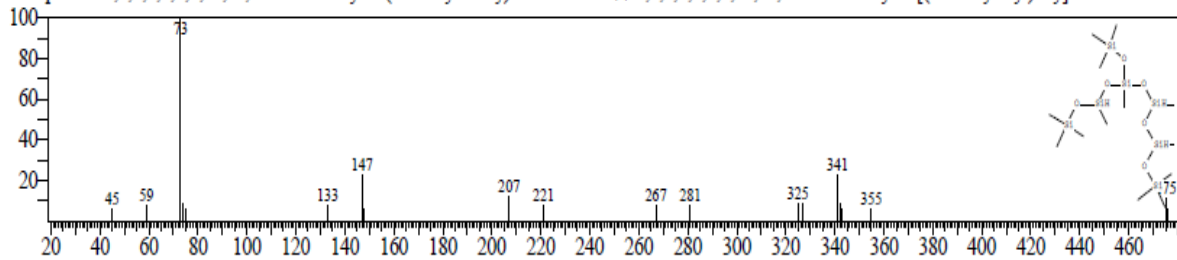
Line#:14 R.Time:10.833(Scan#:881) MassPeaks:30
 RawMode:Averaged 10.825-10.842(880-882) BasePeak:73.10(23336)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



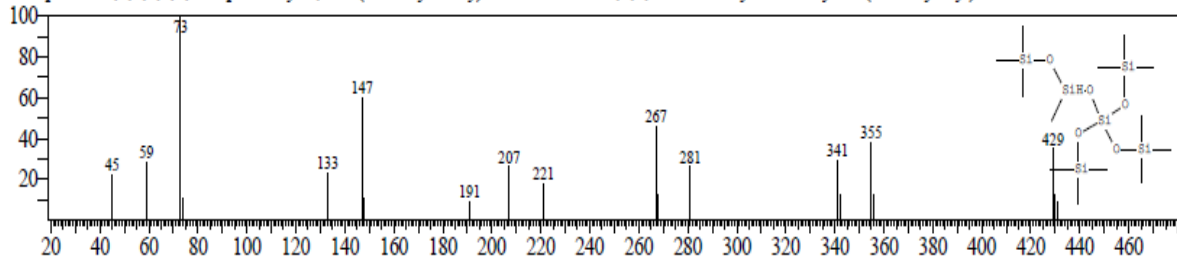
Hit#:1 Entry:15228 Library:NIST20M2.lib
 SI:80 Formula:C12H38O5Si6 CAS:995-82-4 MolWeight:430 RefIndex:1341
 CompName:Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl- \$ 1,1,3,3,5,5,7,7,9,9,11,11-Dodecamethylhexasiloxane #



Hit#:2 Entry:32796 Library:NIST20M2.lib
 SI:77 Formula:C13H42O6Si7 CAS:50694-26-3 MolWeight:490 RefIndex:1570
 CompName:1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsiloxy)hexasiloxane \$ 1,1,1,3,5,7,9,11,11,11-Decamethyl-5-[(trimethylsilyloxy)hexasiloxane #

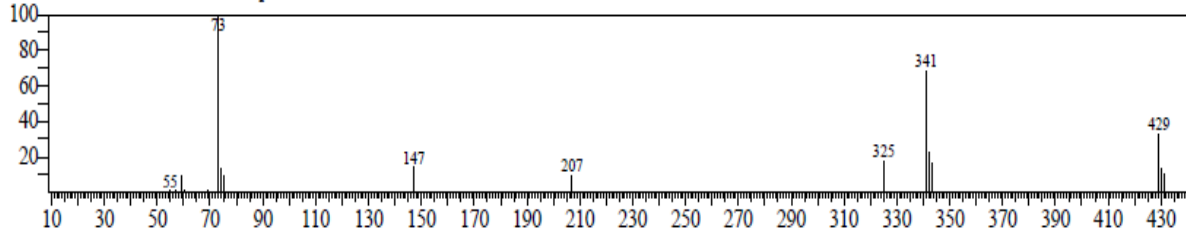


Hit#:3 Entry:20636 Library:NIST20M2.lib
 SI:76 Formula:C13H40O5Si6 CAS:38147-00-1 MolWeight:444 RefIndex:1297
 CompName:1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane \$ 1,3,3,3-Tetramethylidisiloxanyl tris(trimethylsilyl) orthosilicate #

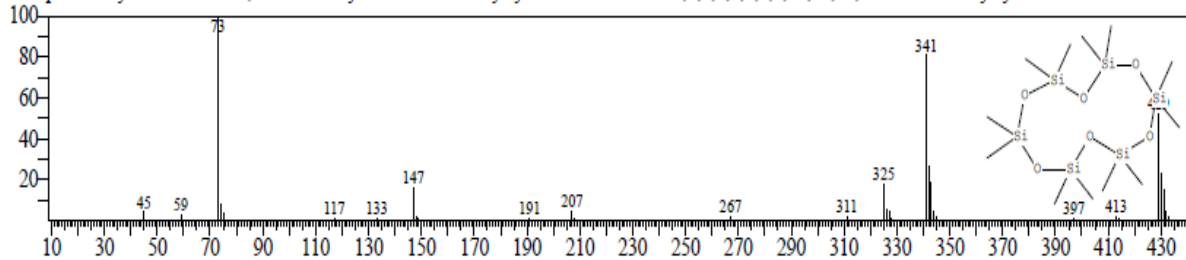


<< Target >>

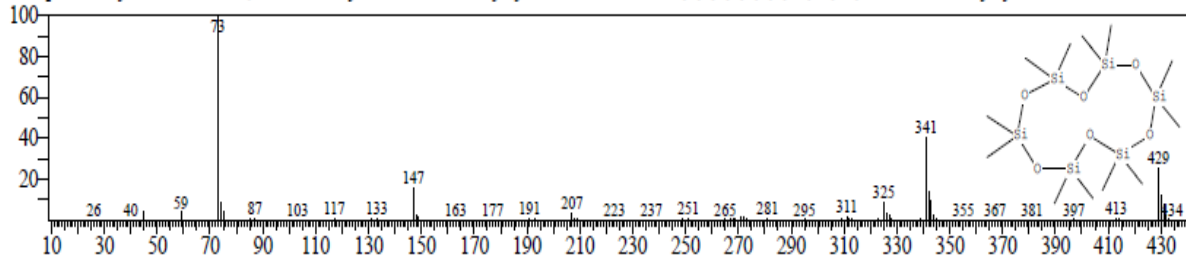
Line#:15 R.Time:11.042(Scan#:906) MassPeaks:18
 RawMode:Averaged 11.033-11.050(905-907) BasePeak:73.10(12923)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



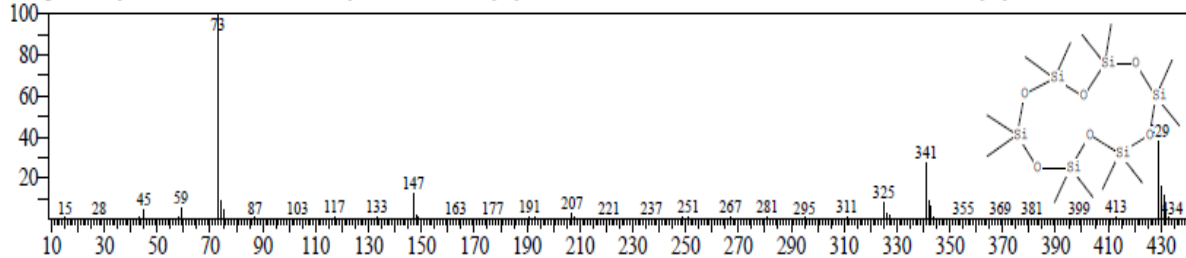
Hit#:1 Entry:42510 Library:NIST20R.lib
 SI:89 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #



Hit#:2 Entry:42511 Library:NIST20R.lib
 SI:87 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

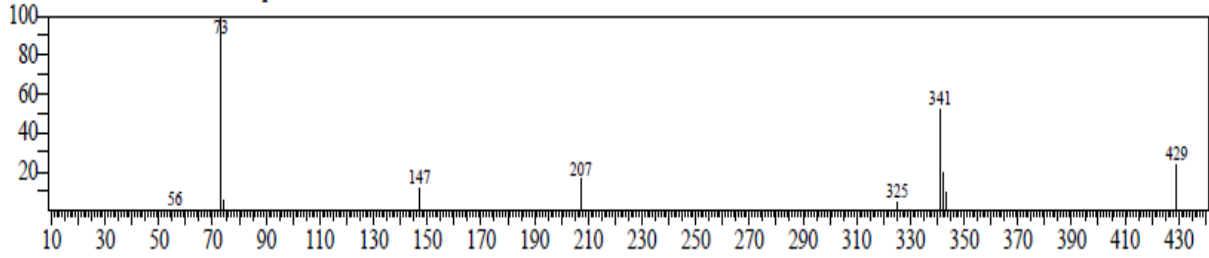


Hit#:3 Entry:20632 Library:NIST20M2.lib
 SI:86 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

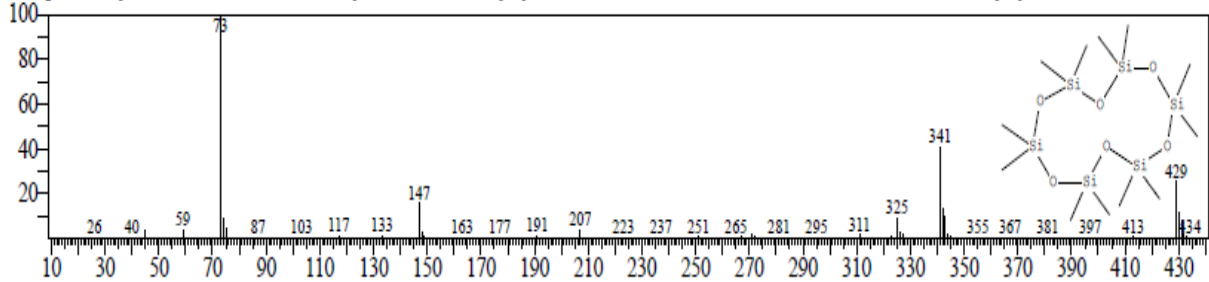


<< Target >>

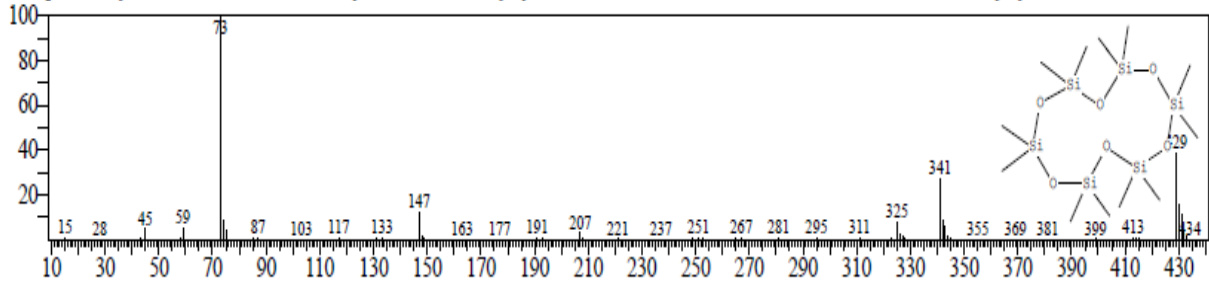
Line#:16 R.Time:11.508(Scan#:962) MassPeaks:12
 RawMode:Averaged 11.500-11.517(961-963) BasePeak:73.10(7672)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



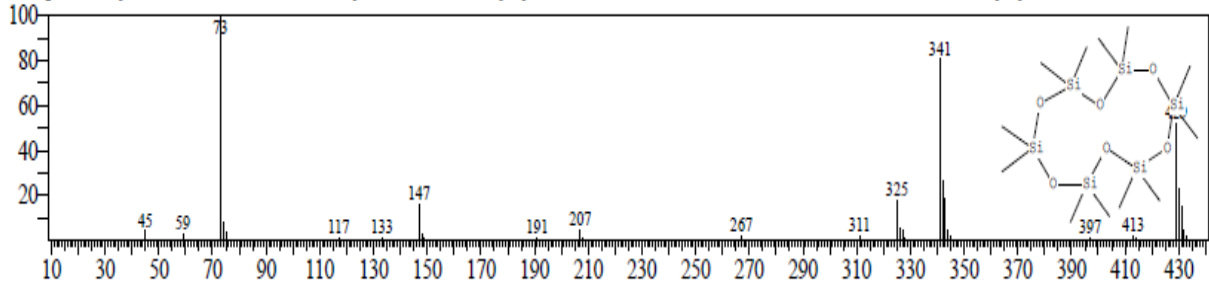
Hit#:1 Entry:42511 Library:NIST20R.lib
 SI:83 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #



Hit#:2 Entry:20632 Library:NIST20M2.lib
 SI:80 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

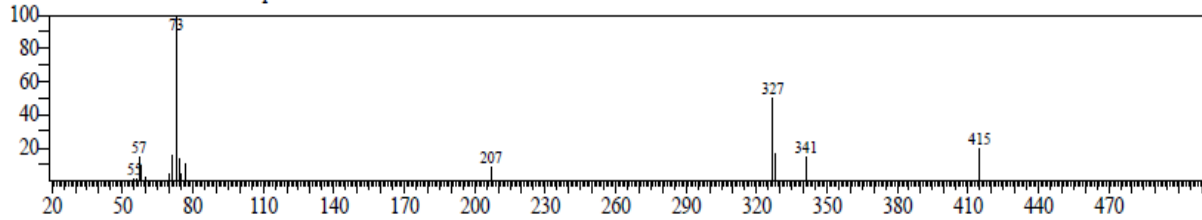


Hit#:3 Entry:42510 Library:NIST20R.lib
 SI:78 Formula:C₁₂H₃₆O₆Si₆ CAS:540-97-6 MolWeight:444 RetIndex:1240
 CompName:Cyclohexasiloxane, dodecamethyl- \$\$ Dodecamethylcyclohexasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #

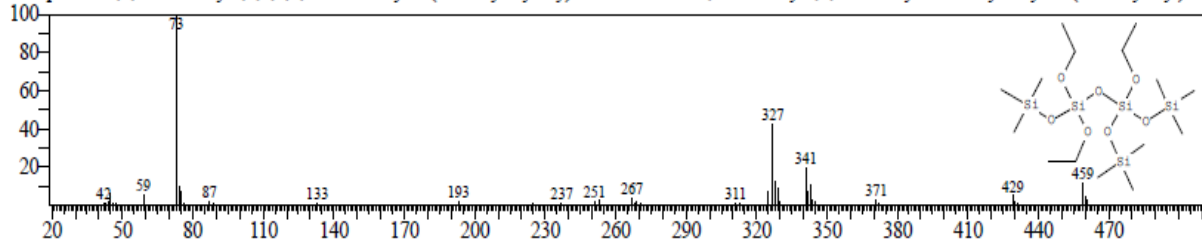


<< Target >>

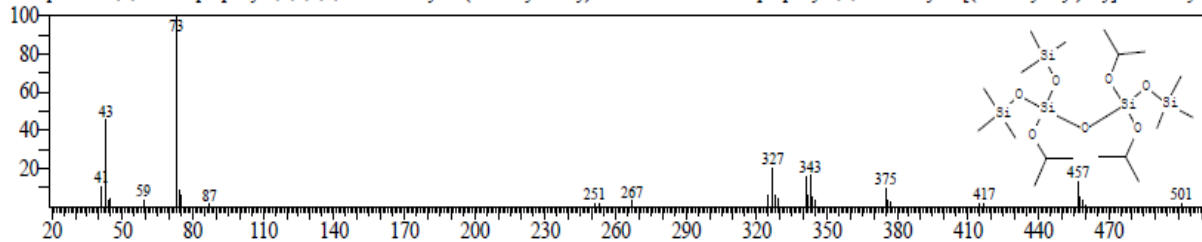
Line#:17 R.Time:12.158(Scan#:1040) MassPeaks:16
 RawMode:Averaged 12.150-12.167(1039-1041) BasePeak:73.05(8329)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



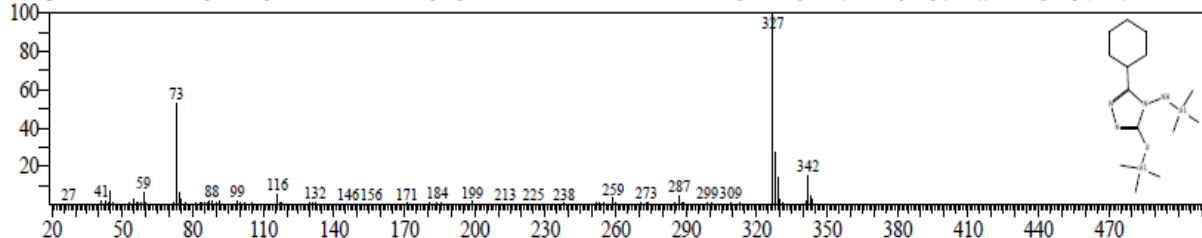
Hit#:1 Entry:29389 Library:NIST20M2.lib
 SI:65 Formula:C15H42O7Si5 CAS:0-00-0 MolWeight:474 RetIndex:1594
 CompName:3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane \$\$ 1,1-Diethoxy-3,3,3-trimethyldisiloxanyl ethyl bis(trimethylsilyl) or



Hit#:2 Entry:36735 Library:NIST20M2.lib
 SI:64 Formula:C18H48O7Si5 CAS:71579-65-2 MolWeight:516 RetIndex:1699
 CompName:3,3,5-Triisopropoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane \$\$ 1-Isopropoxy-3,3,3-trimethyl-1-[(trimethylsilyloxy)disiloxanyl

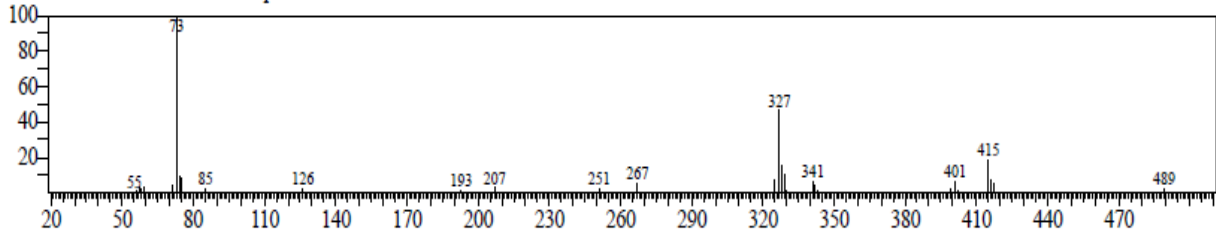


Hit#:3 Entry:211331 Library:NIST20M1.lib
 SI:60 Formula:C14H30N4SSi2 CAS:0-00-0 MolWeight:342 RetIndex:2159
 CompName:4-Amino-5-cyclohexyl-4H-1,2,4-triazol-3-yl hydrosulfide, 2TMS derivative \$\$ 3-cyclohexyl-N-(trimethylsilyl)-5-((trimethylsilyl)thio)-4H-1,2,4

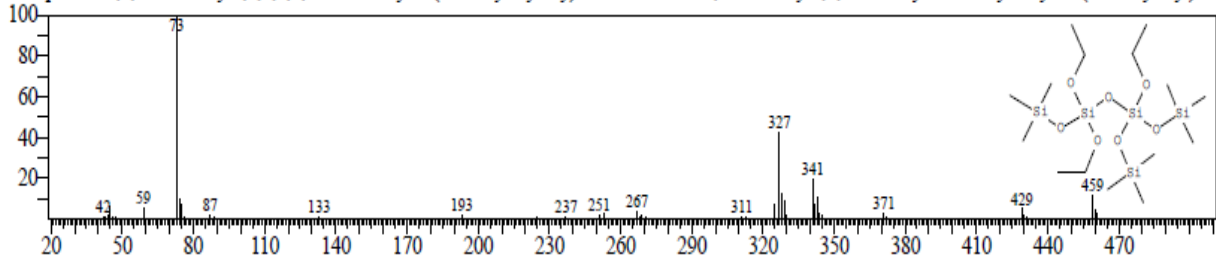


<< Target >>

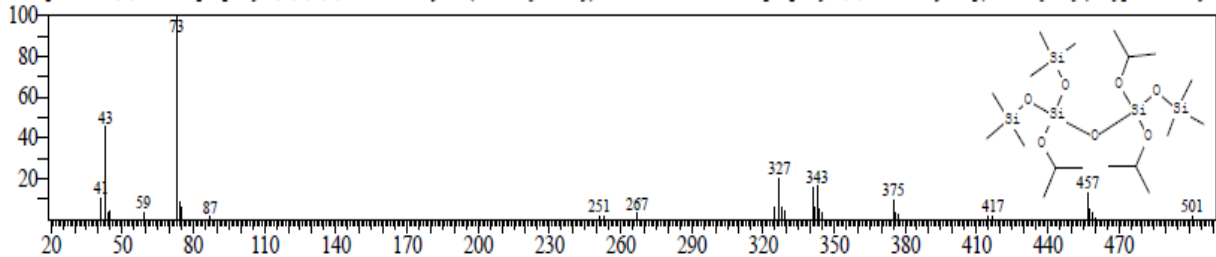
Line#:18 R Time:12.433(Scan#:1073) MassPeaks:31
 RawMode:Averaged 12.425-12.442(1072-1074) BasePeak:73.10(33996)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



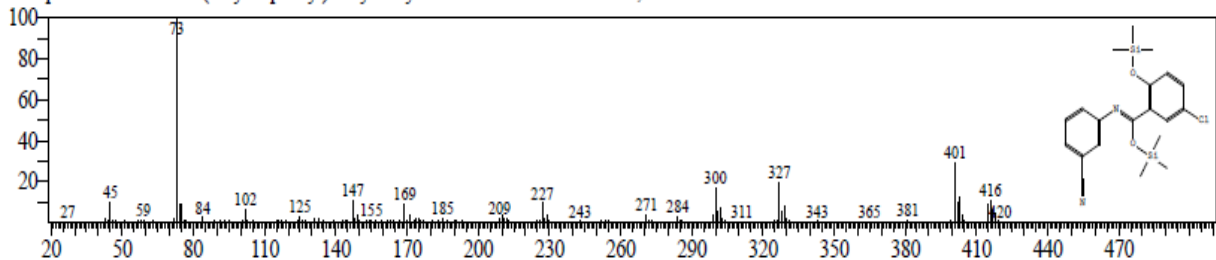
Hit#:1 Entry:29389 Library:NIST20M2.lib
 SI:76 Formula:C15H42O7Si5 CAS:0-00-0 MolWeight:474 RetIndex:1594
 CompName:3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane \$\$ 1,1-Diethoxy-3,3,3-trimethyldisiloxanyl ethyl bis(trimethylsilyl) or



Hit#:2 Entry:36735 Library:NIST20M2.lib
 SI:74 Formula:C18H48O7Si5 CAS:71579-65-2 MolWeight:516 RetIndex:1699
 CompName:3,3,5-Triisopropoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane \$\$ 1-Isopropoxy-3,3,3-trimethyl-1-[(trimethylsilyl)oxy]disiloxanyl

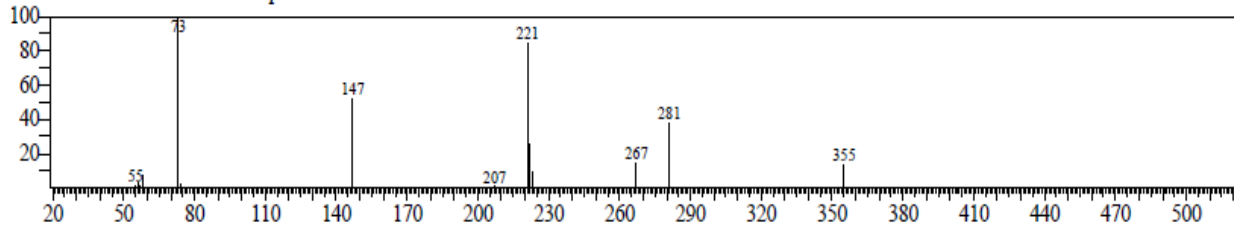


Hit#:3 Entry:8880 Library:NIST20M2.lib
 SI:62 Formula:C20H25ClN2O2Si2 CAS:0-00-0 MolWeight:416 RetIndex:2699
 CompName:5-Chloro-N-(3-cyanophenyl)-2-hydroxybenzene-1-carboximidic acid, 2 TMS derivative

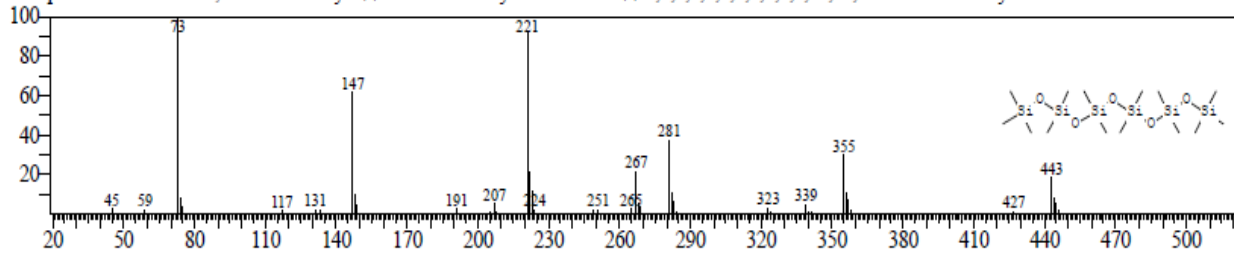


<<Target >>

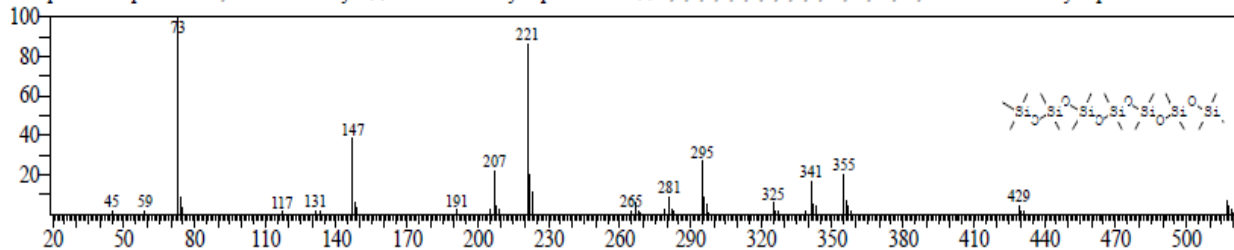
Line#:19 R Time:12.525(Scan#:1084) MassPeaks:14
 RawMode:Averaged 12.517-12.533(1083-1085) BasePeak:73.10(5460)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



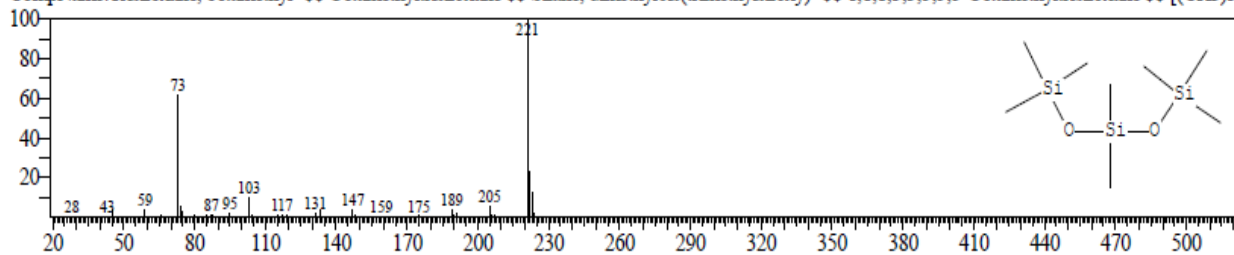
Hit#:1 Entry:25143 Library:NIST20M2.lib
 SI:80 Formula:C14H42O5Si6 CAS:107-52-8 MolWeight:458 RetIndex:1252
 CompName:Hexasiloxane, tetradecamethyl- \$\$ Tetradecamethylhexasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,11,11,11-Tetradecamethylhexasiloxane #



Hit#:2 Entry:38404 Library:NIST20M2.lib
 SI:74 Formula:C16H48O6Si7 CAS:541-01-5 MolWeight:532 RetIndex:1437
 CompName:Heptasiloxane, hexadecamethyl- \$\$ Hexadecamethylheptasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,11,11,13,13,13-Hexadecamethylheptasiloxane #

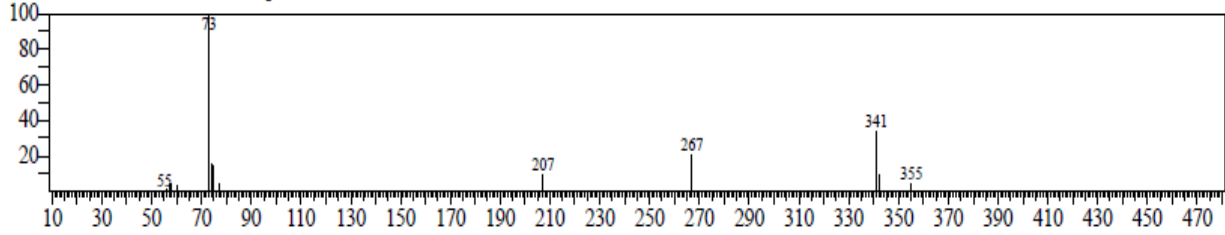


Hit#:3 Entry:28950 Library:NIST20R.lib
 SI:69 Formula:C8H24O2Si3 CAS:107-51-7 MolWeight:236 RetIndex:698
 CompName:Trisiloxane, octamethyl- \$\$ Octamethyltrisiloxane \$\$ Silane, dimethylbis(trimethylsiloxy)- \$\$ 1,1,1,3,3,5,5,5-Octamethyltrisiloxane \$\$ [(CH3)3



<<Target >>

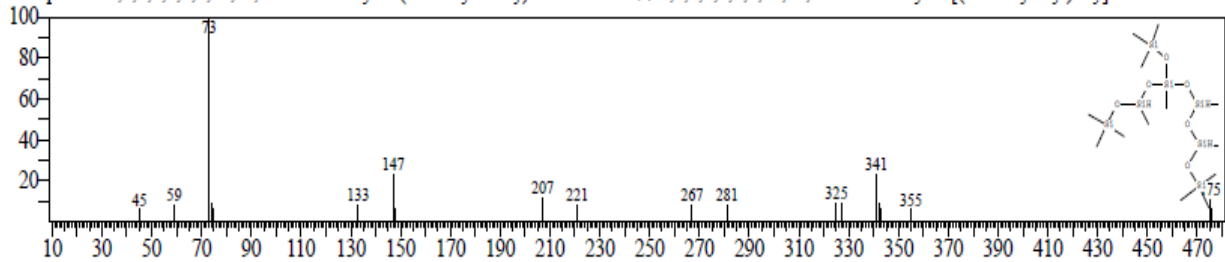
Line#:20 R Time:12.742(Scan#:1110) MassPeaks:14
 RawMode:Averaged 12.733-12.750(1109-1111) BasePeak:73.05(8537)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



Hit#:1 Entry:32796 Library:NIST20M2.lib

SI:72 Formula:C13H42O6Si7 CAS:50694-26-3 MolWeight:490 RefIndex:1570

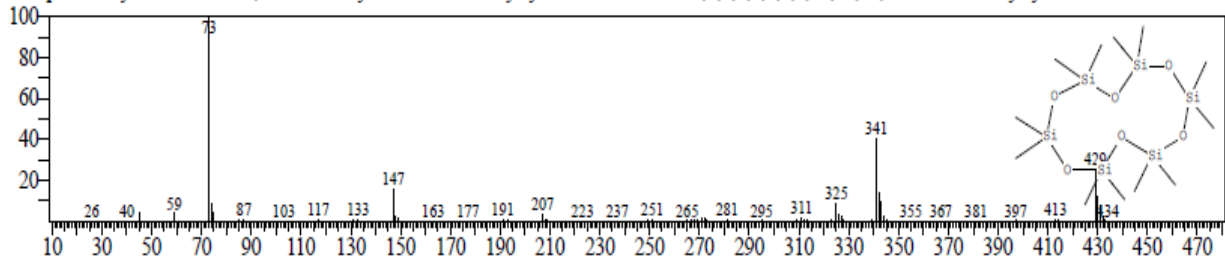
CompName:1,1,1,3,5,7,9,11,11,11-Decamethyl-5-(trimethylsilyloxy)hexasiloxane \$ 1,1,1,3,5,7,9,11,11,11-Decamethyl-5-[(trimethylsilyl)oxy]hexasiloxane #



Hit#:2 Entry:42511 Library:NIST20R.lib

SI:67 Formula:C12H36O6Si6 CAS:540-97-6 MolWeight:444 RefIndex:1240

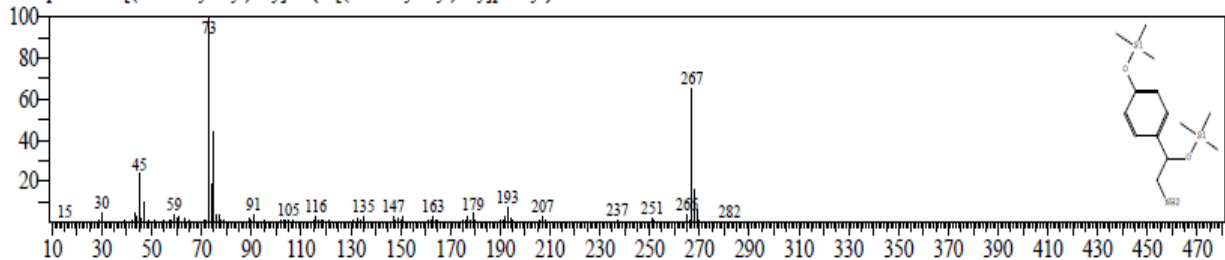
CompName:Cyclohexasiloxane, dodecamethyl- \$ Dodecamethylcyclohexasiloxane \$ 2,2,4,4,6,6,8,8,10,10,12,12-Dodecamethylcyclohexasiloxane #



Hit#:3 Entry:159469 Library:NIST20M1.lib

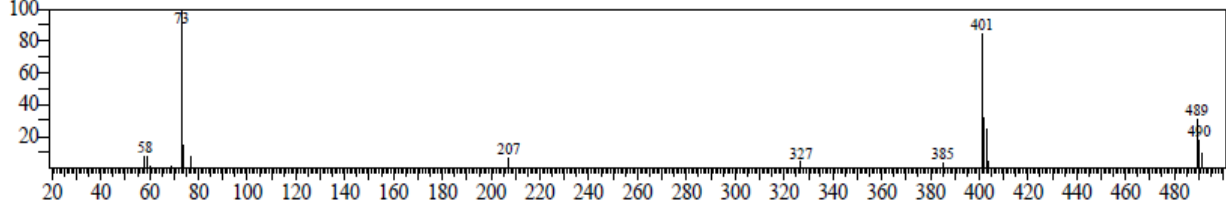
SI:65 Formula:C14H27NO2Si2 CAS:0-00-0 MolWeight:297 RefIndex:1654

CompName:2-[(Trimethylsilyl)oxy]-2-[4-(trimethylsilyl)oxy]phenyl}ethanamine

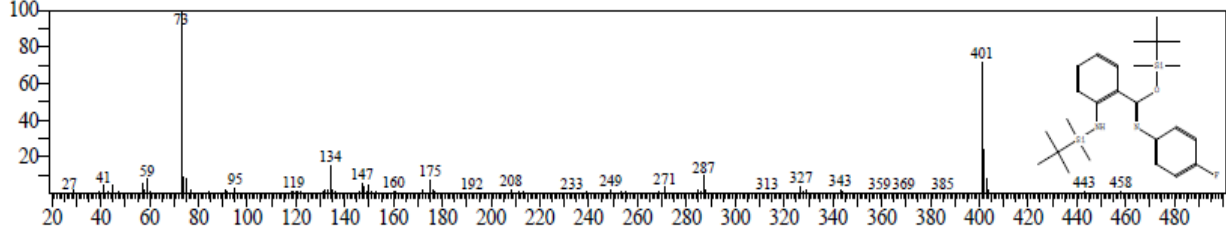


<< Target >>

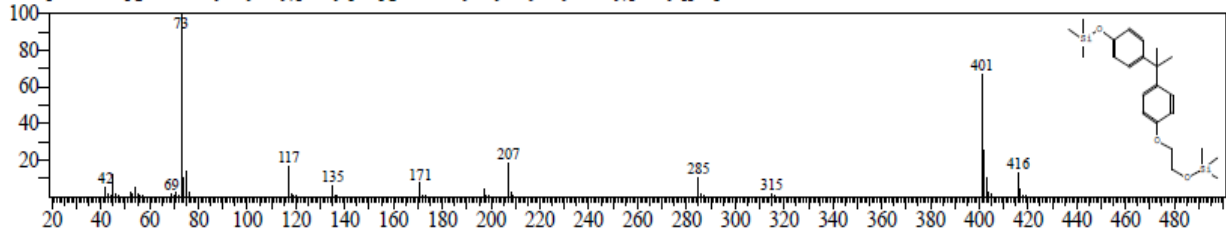
Line#:21 R Time:13.117(Scan#:1155) MassPeaks:17
 RawMode:Averaged 13.108-13.125(1154-1156) BasePeak:73.10(10378)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



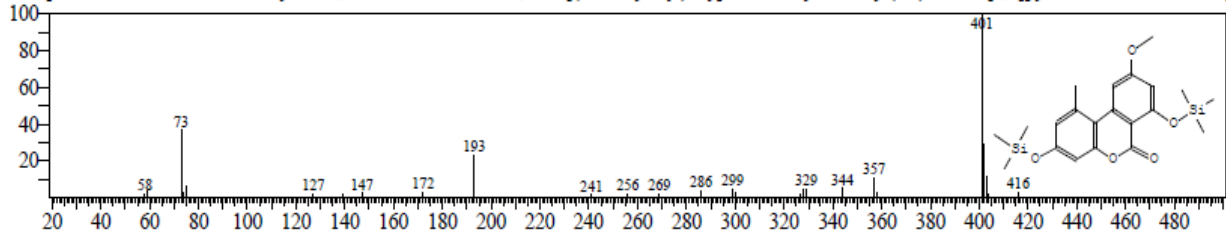
Hit#:1 Entry:25348 Library:NIST20M2.lib
 SI:70 Formula:C25H39FN2OSi2 CAS:0-00-0 MolWeight:458 RetIndex:2766
 CompName:2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative



Hit#:2 Entry:9083 Library:NIST20M2.lib
 SI:68 Formula:C23H36O3Si2 CAS:0-00-0 MolWeight:416 RetIndex:2451
 CompName:2-[(p-Trimethylsilyloxy)phenyl]-2-[(p-trimethylsilyloxyethylenoxy)phenyl]propane

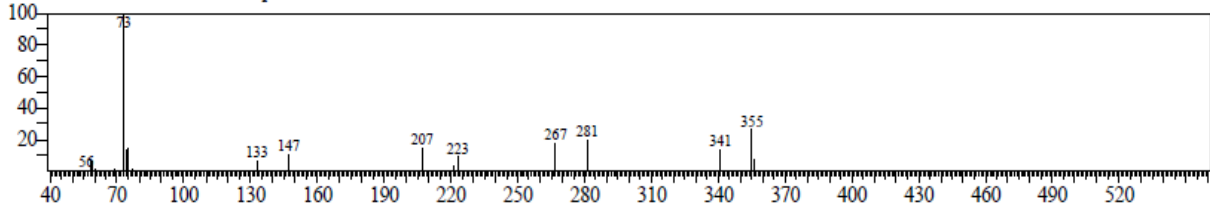


Hit#:3 Entry:41992 Library:NIST20R.lib
 SI:65 Formula:C21H28O5Si2 CAS:959286-82-9 MolWeight:416 RetIndex:2737
 CompName:Alternariol monomethyl ether, 2TMS derivative \$\$ 3,7-Bis[(trimethylsilyl)oxy]-9-methoxy-1-methyl(6H)dibenzo[b,d]pyran-6-one \$\$ 9-Methox



<< Target >>

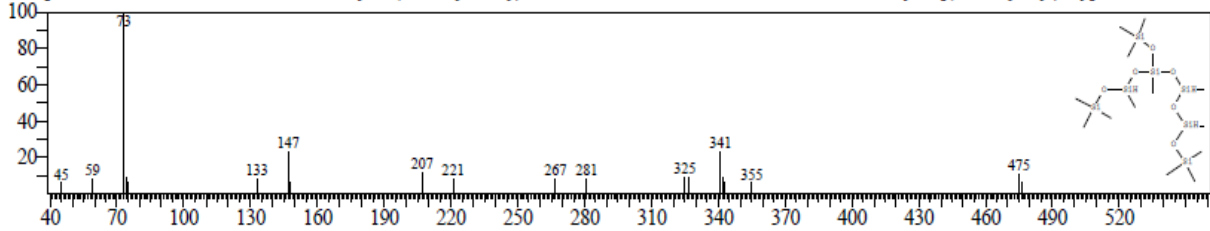
Line#:22 R Time:13.808(Scan#:1238) MassPeaks:19
 RawMode:Averaged 13.800-13.817(1237-1239) BasePeak:73.05(11830)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



Hit#:1 Entry:32796 Library:NIST20M2.lib

SI:77 Formula:C13H42O6Si7 CAS:50694-26-3 MolWeight:490 RetIndex:1570

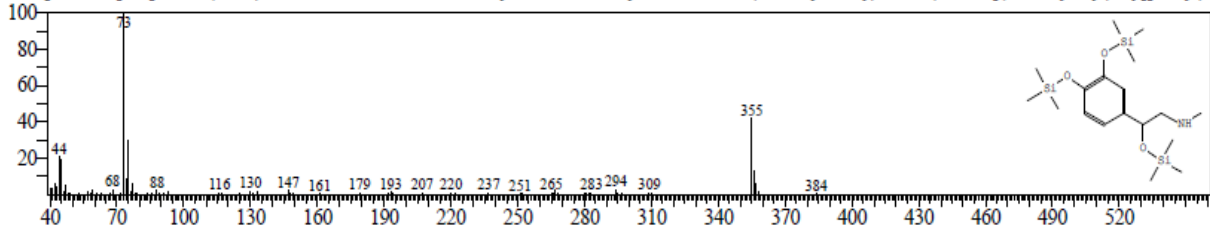
CompName:1,1,1,3,5,7,9,11,11,11-Decamethyl-5-[(trimethylsilyloxy)hexasiloxane #



Hit#:2 Entry:41575 Library:NIST20R.lib

SI:76 Formula:C18H37NO3Si3 CAS:10538-85-9 MolWeight:399 RetIndex:2007

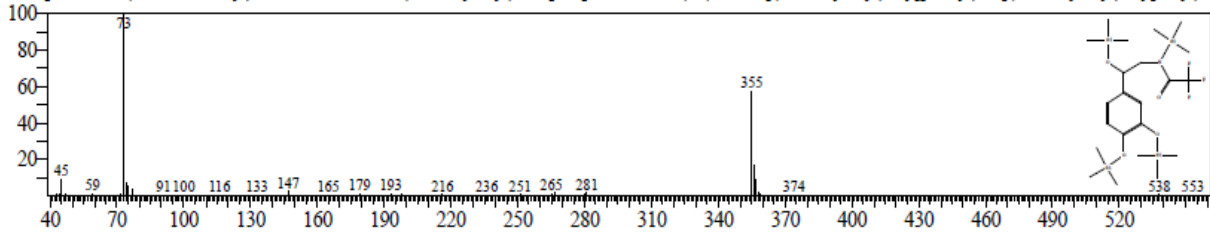
CompName:Epinephrine, (.beta.-), 3TMS derivative \$\$ Phenethylamine, N-methyl-.beta.,3,4-tris(trimethylsilyloxy)- \$\$ 2-(3,4-Bis[(trimethylsilyloxy)phenyl]-



Hit#:3 Entry:40286 Library:NIST20M2.lib

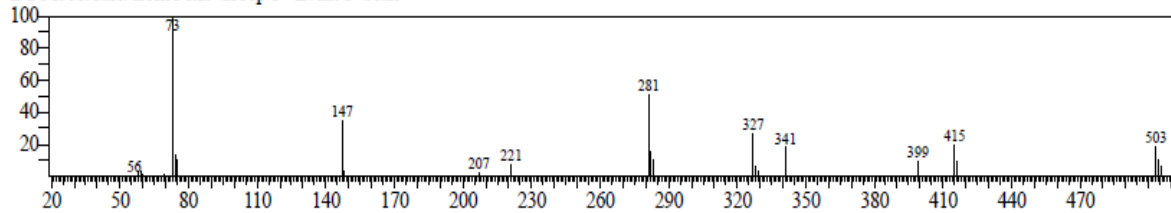
SI:75 Formula:C22H42F3NO4Si4 CAS:0-00-0 MolWeight:553 RetIndex:2151

CompName:N-(Trifluoroacetyl)-N,O,O',O'-tetrakis(trimethylsilyl)norepinephrine \$\$ N-(2-(3,4-Bis[(trimethylsilyloxy)phenyl]-2-[(trimethylsilyloxy)ethyl]-

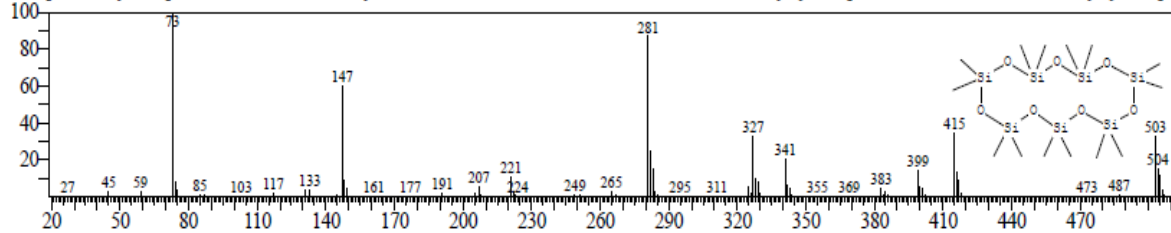


<< Target >>

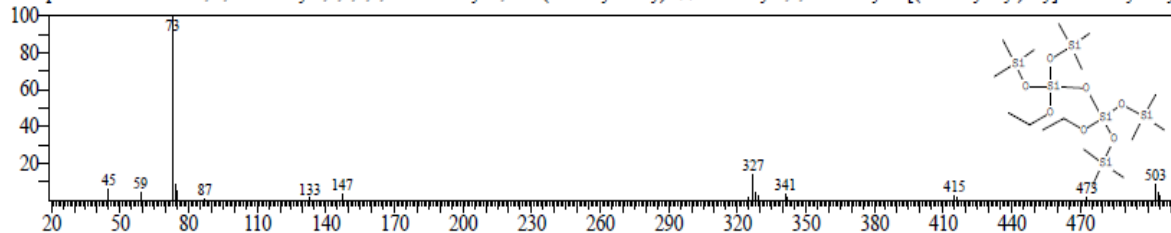
Line#:23 R.Time:13.925(Scan#:1252) MassPeaks:25
 RawMode:Averaged 13.917-13.933(1251-1253) BasePeak:73.05(12545)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



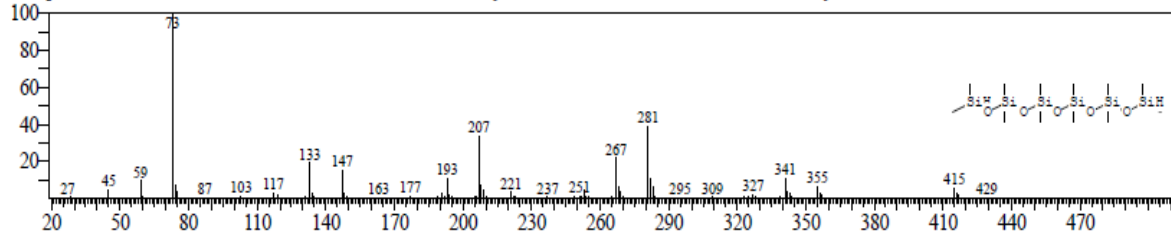
Hit#:1 Entry:36969 Library:NIST20M2.lib
 SI:82 Formula:C14H42O7Si7 CAS:107-50-6 MolWeight:518 RetIndex:1447
 CompName:Cycloheptasiloxane, tetradecamethyl- \$\$ 2,2,4,4,6,6,8,8,10,10,12,12,14,14-Tetradecamethylcycloheptasiloxane # \$\$ Tetradecamethylcyclohept



Hit#:2 Entry:36981 Library:NIST20M2.lib
 SI:70 Formula:C16H46O7Si6 CAS:72439-78-2 MolWeight:518 RetIndex:1603
 CompName:Tetrasiloxane, 3,5-diethoxy-1,1,1,7,7,7-hexamethyl-3,5-bis(trimethylsilyloxy)- \$\$ 1-Ethoxy-3,3,3-trimethyl-1-[(trimethylsilyloxy)disiloxanyl ethy

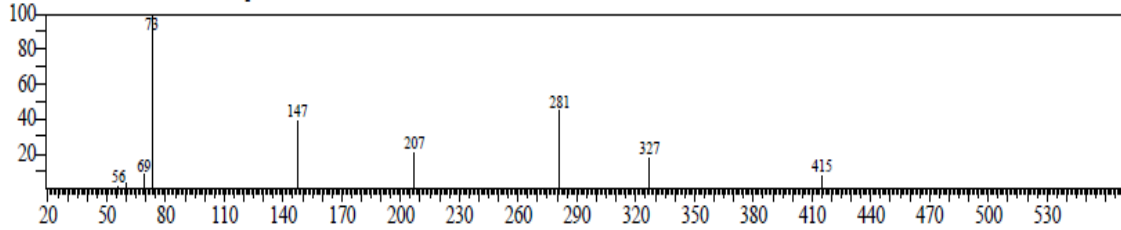


Hit#:3 Entry:15228 Library:NIST20M2.lib
 SI:66 Formula:C12H38O5Si6 CAS:995-82-4 MolWeight:430 RetIndex:1341
 CompName:Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl- \$\$ 1,1,3,3,5,5,7,7,9,9,11,11-Dodecamethylhexasiloxane #

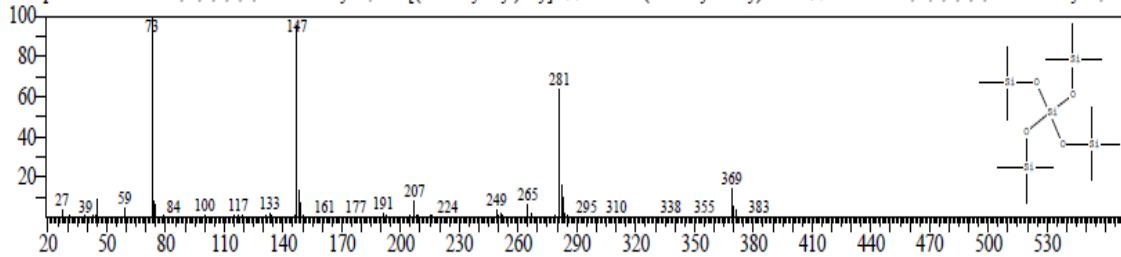


<< Target >>

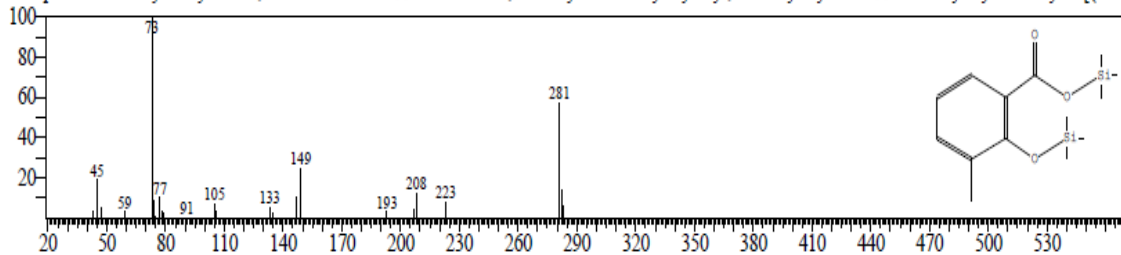
Line#:24 R.Time:14.317(Scan#:1299) MassPeaks:9
 RawMode:Averaged 14.308-14.325(1298-1300) BasePeak:73.05(5218)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



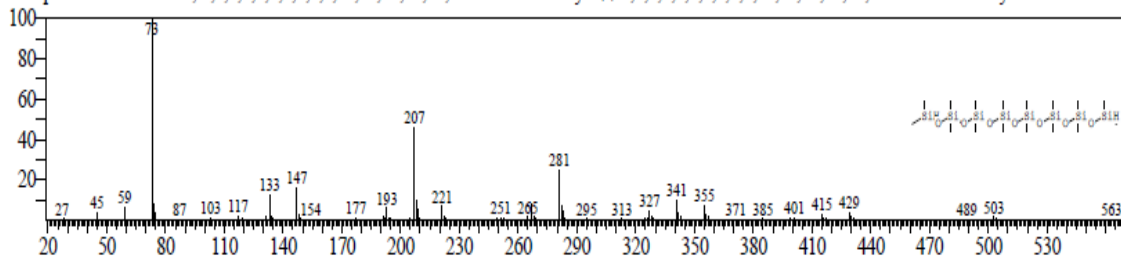
Hit#:1 Entry:249272 Library:NIST20M1.lib
 SI:67 Formula:C12H36O4Si5 CAS:3555-47-3 MolWeight:384 RetIndex:1068
 CompName:Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-bis[(trimethylsilyloxy)-] Tetrakis(trimethylsiloxy)silane \$ Trisiloxane, 1,1,1,5,5,5-hexamethyl-3,3-b



Hit#:2 Entry:158096 Library:NIST20M1.lib
 SI:66 Formula:C14H24O3Si2 CAS:0-00-0 MolWeight:296 RetIndex:1580
 CompName:3-Methylsalicylic acid, 2TMS derivative \$ Benzoic acid, 3-methyl-2-trimethylsilyloxy-, trimethylsilyl ester \$ Trimethylsilyl 3-methyl-2-[(trim

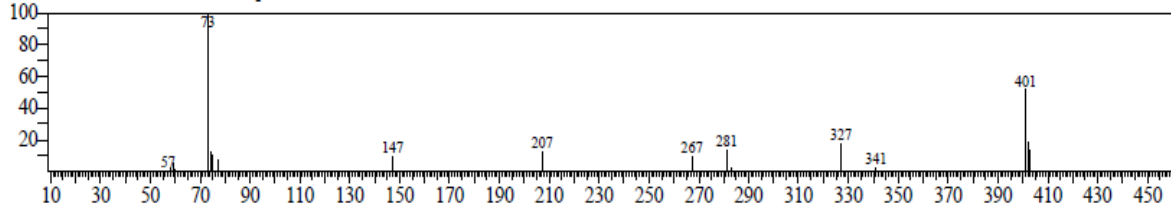


Hit#:3 Entry:41754 Library:NIST20M2.lib
 SI:65 Formula:C16H50O7Si8 CAS:19095-24-0 MolWeight:578 RetIndex:1710
 CompName:Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl- \$ 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-Hexadecamethyloctasiloxane #

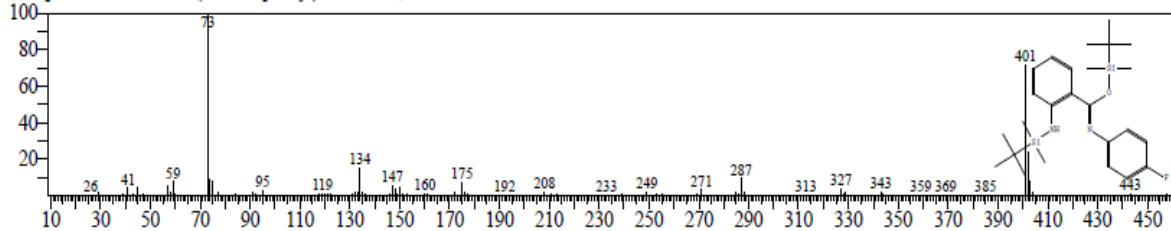


<<Target>>

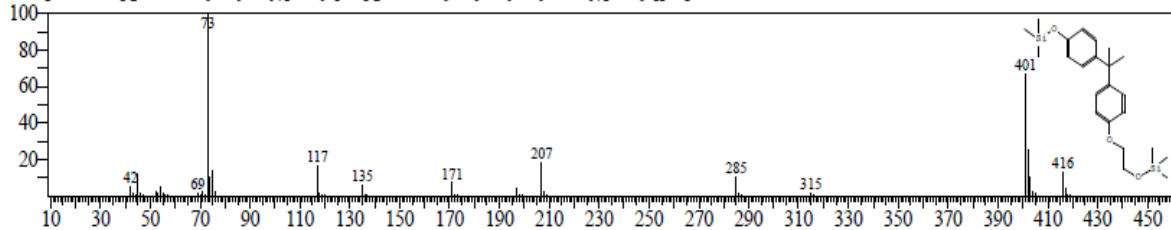
Line#:25 R.Time:15.008(Scan#:1382) MassPeaks:19
 RawMode:Averaged 15.000-15.017(1381-1383) BasePeak:73.10(14475)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



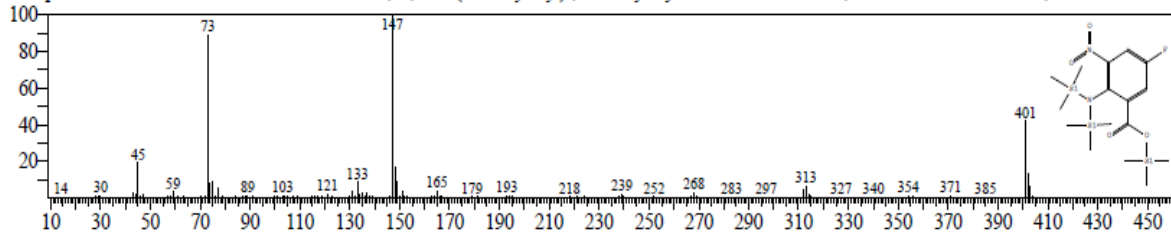
Hit#:1 Entry:25348 Library:NIST20M2.lib
 SI:73 Formula:C25H39FN2OSi2 CAS:0-00-0 MolWeight:458 RetIndex:2766
 CompName:2-Amino-N-(4-fluorophenyl)benzamide, 2TBDMS derivative



Hit#:2 Entry:9083 Library:NIST20M2.lib
 SI:71 Formula:C23H36O3Si2 CAS:0-00-0 MolWeight:416 RetIndex:2451
 CompName:2-[(p-Trimethylsilyloxy)phenyl]-2-[(p-trimethylsilyloxyethyloxy)phenyl]propane

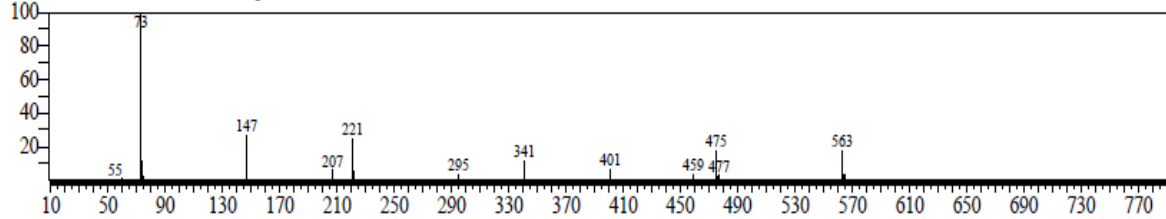


Hit#:3 Entry:8784 Library:NIST20M2.lib
 SI:67 Formula:C16H29FN2O4Si3 CAS:0-00-0 MolWeight:416 RetIndex:2019
 CompName:2-Amino-5-fluoro-3-nitrobenzoic acid, N,N-bis(trimethylsilyl)-, trimethylsilyl ester \$\$ Benzoic acid, 2-amino-5-fluoro-3-nitro-, 3TMS

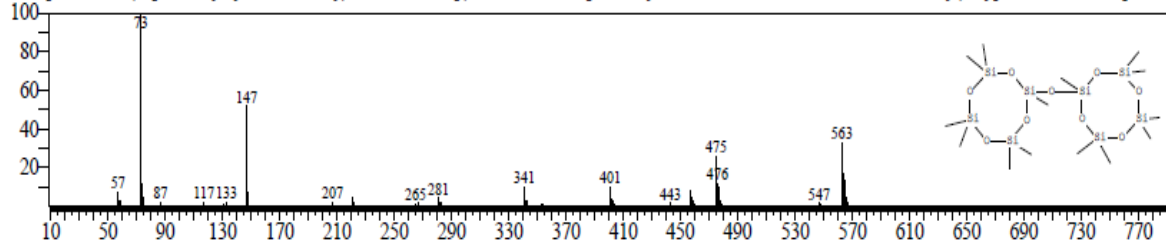


<< Target >>

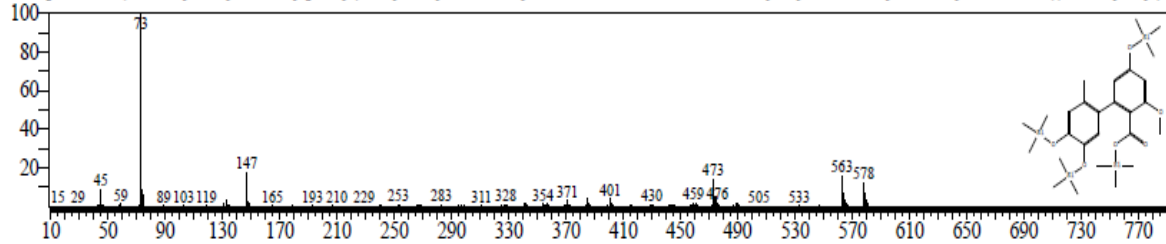
Line#:26 R.Time:15.175(Scan#:1402) MassPeaks:20
 RawMode:Averaged 15.167-15.183(1401-1403) BasePeak:73.05(13964)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



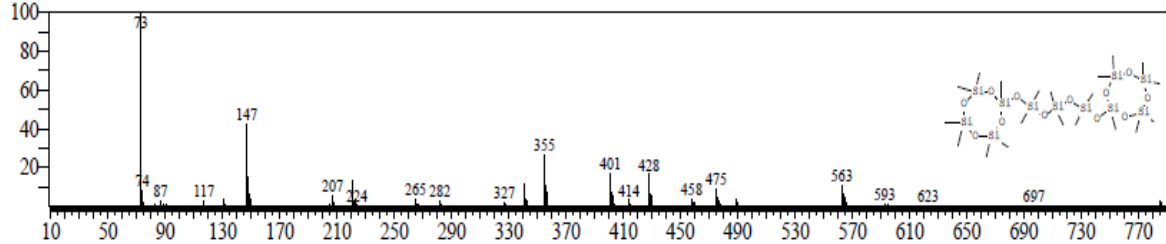
Hit#:1 Entry:41746 Library:NIST20M2.lib
 SI:76 Formula:C14H42O9Si8 CAS:17909-39-6 MolWeight:578 RefIndex:1510
 CompName:Bis(heptamethylcyclotetrasiloxane)siloxane \$ 2-[(2,4,4,6,6,8,8-Heptamethyl-1,3,5,7,2,4,6,8-tetraoxatetrasilocan-2-yl)oxy]-2,4,4,6,6,8,8-heptame



Hit#:2 Entry:41767 Library:NIST20M2.lib
 SI:69 Formula:C27H46O6Si4 CAS:0-00-0 MolWeight:578 RefIndex:3052
 CompName:2-(4,5-Dihydroxy-2-methylphenyl)-4-hydroxy-6-methoxybenzoic acid, 4TMS \$ 3-Trimethylsilyl 3-methoxy-2'-methyl-4',5,5'-tris(trimethylsilyl)

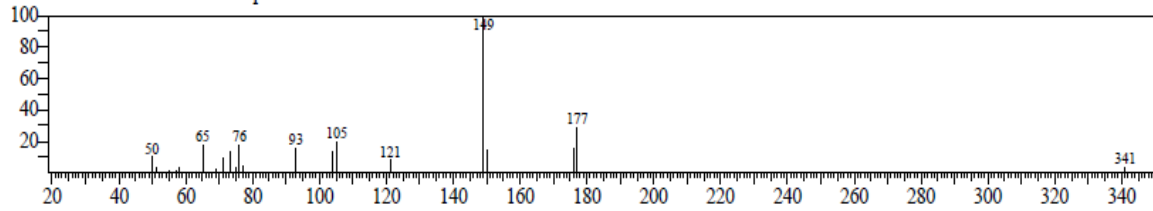


Hit#:3 Entry:46103 Library:NIST20M2.lib
 SI:69 Formula:C20H60O12Si11 CAS:71449-67-7 MolWeight:800 RefIndex:2064
 CompName:Bis(heptamethylcyclotetrasiloxane)hexamethyltrisiloxane \$ 2-((5-[(2,4,4,6,6,8,8-Heptamethyl-1,3,5,7,2,4,6,8-tetraoxatetrasilocan-2-yl)oxy]-1,1,3

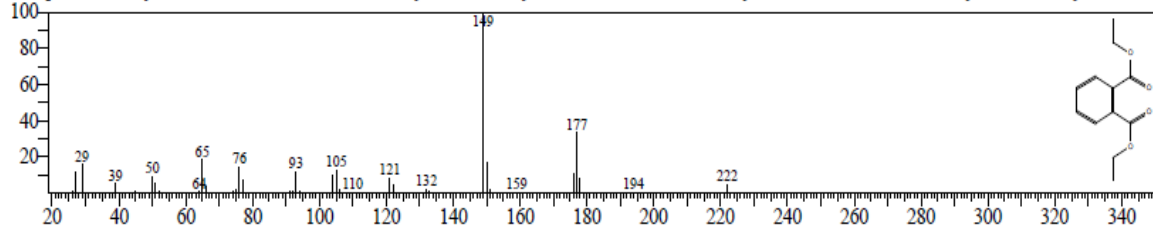


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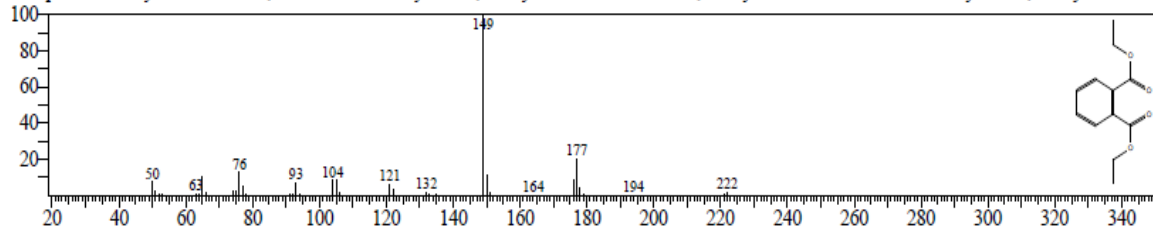
Line#:27 R.Time:15.508(Scan#:1442) MassPeaks:21
 RawMode:Averaged 15.500-15.517(1441-1443) BasePeak:149.05(11038)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



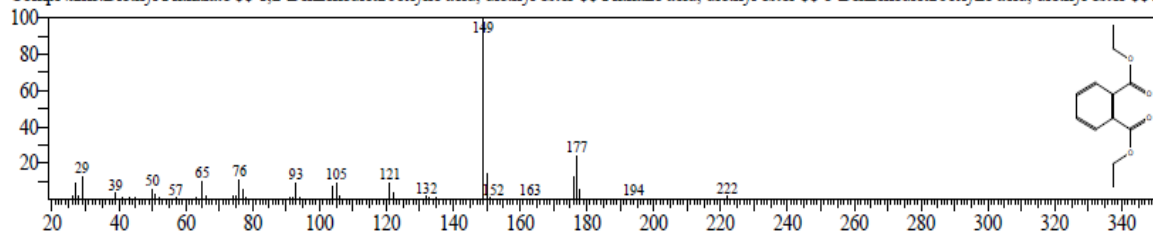
Hit#1 Entry:26842 Library:NIST20R.lib
 SI:85 Formula:C12H14O4 CAS:84-66-2 MolWeight:222 RetIndex:1639
 CompName:Diethyl Phthalate \$\$ 1,2-Benzenedicarboxylic acid, diethyl ester \$\$ Phthalic acid, diethyl ester \$\$ o-Benzenedicarboxylic acid, diethyl ester \$\$ /



Hit#2 Entry:26843 Library:NIST20R.lib
 SI:85 Formula:C12H14O4 CAS:84-66-2 MolWeight:222 RetIndex:1639
 CompName:Diethyl Phthalate \$\$ 1,2-Benzenedicarboxylic acid, diethyl ester \$\$ Phthalic acid, diethyl ester \$\$ o-Benzenedicarboxylic acid, diethyl ester \$\$ /

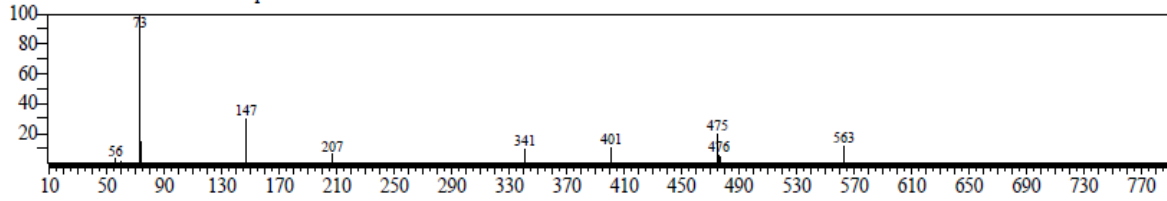


Hit#3 Entry:26840 Library:NIST20R.lib
 SI:84 Formula:C12H14O4 CAS:84-66-2 MolWeight:222 RetIndex:1639
 CompName:Diethyl Phthalate \$\$ 1,2-Benzenedicarboxylic acid, diethyl ester \$\$ Phthalic acid, diethyl ester \$\$ o-Benzenedicarboxylic acid, diethyl ester \$\$ /



<< Target >>

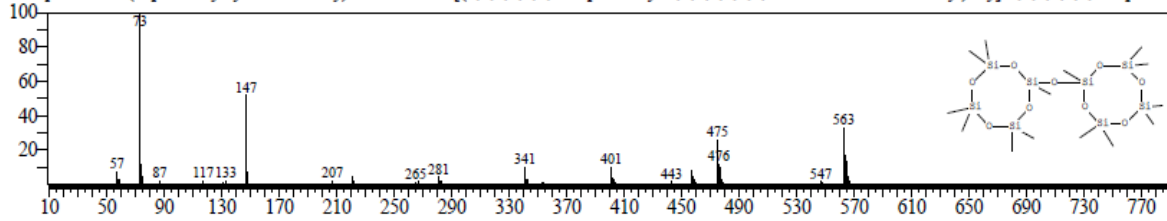
Line#:28 R.Time:15.575(Scan#:1450) MassPeaks:13
 RawMode:Averaged 15.567-15.583(1449-1451) BasePeak:73.10(9394)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



Hit#:1 Entry:41746 Library:NIST20M2.lib

SI:72 Formula:C14H42O9Si8 CAS:17909-39-6 MolWeight:578 RefIndex:1510

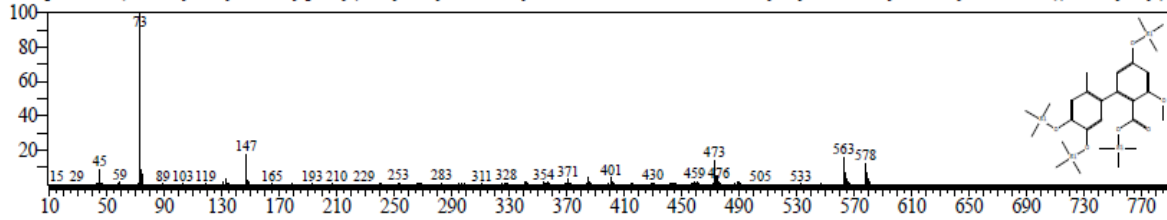
CompName:Bis(heptamethylcyclotetrasiloxane)siloxane \$\$ 2-[(2,4,4,6,6,8,8-Heptamethyl-1,3,5,7,2,4,6,8-tetraoxatetrasilocan-2-yl)oxy]-2,4,4,6,6,8,8-heptame



Hit#:2 Entry:41767 Library:NIST20M2.lib

SI:69 Formula:C27H46O6Si4 CAS:0-00-0 MolWeight:578 RefIndex:3052

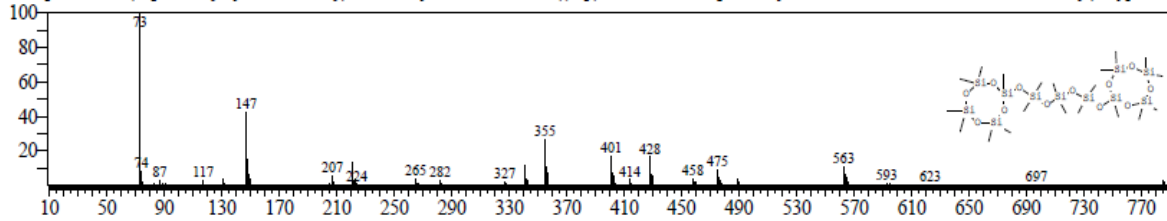
CompName:2-(4,5-Dihydroxy-2-methylphenyl)-4-hydroxy-6-methoxybenzoic acid, 4TMS \$\$ Trimethylsilyl 3-methoxy-2'-methyl-4',5,5'-tris(trimethylsilyl)c



Hit#:3 Entry:46103 Library:NIST20M2.lib

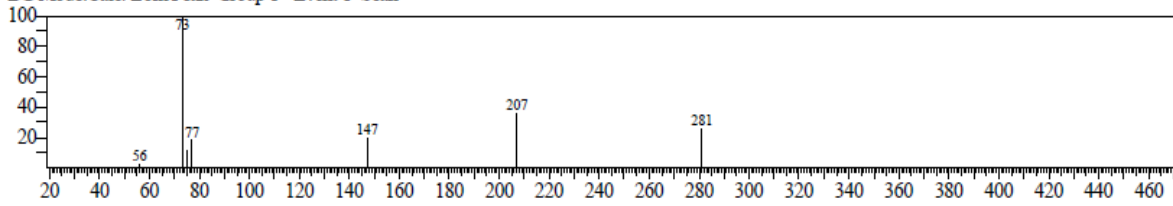
SI:64 Formula:C20H60O12Si11 CAS:71449-67-7 MolWeight:800 RefIndex:2064

CompName:Bis(heptamethylcyclotetrasiloxane)hexamethyltrisiloxane \$\$ 2-(5-[(2,4,4,6,6,8,8-Heptamethyl-1,3,5,7,2,4,6,8-tetraoxatetrasilocan-2-yl)oxy]-1,1,3

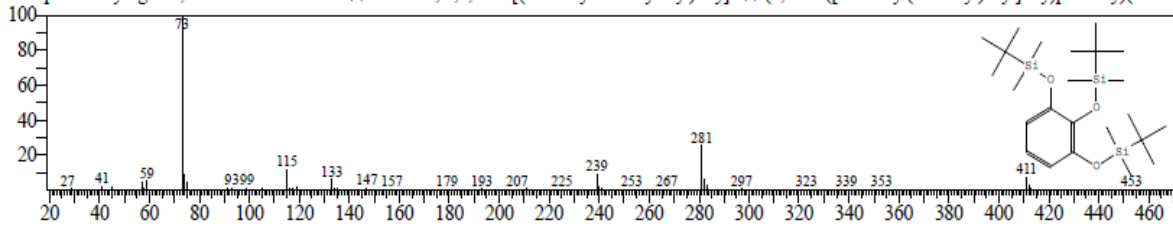


<< Target >>

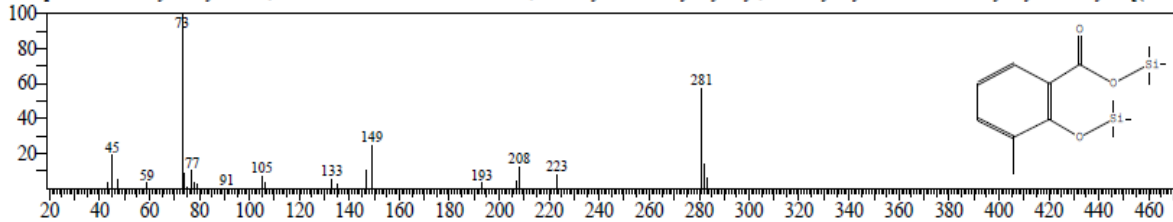
Line#:29 R.Time:16.250(Scan#:1531) MassPeaks:7
 RawMode:Averaged 16.242-16.258(1530-1532) BasePeak:73.10(3891)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



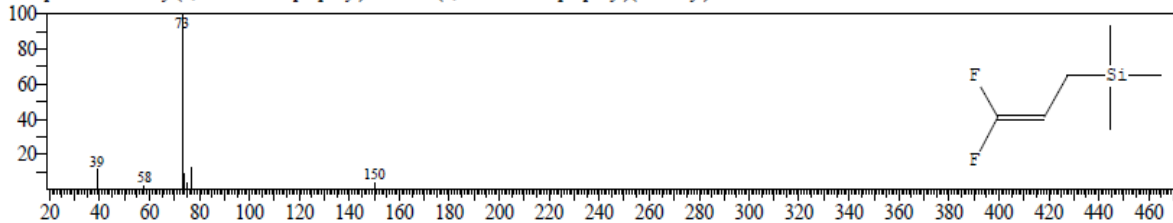
Hit#:1 Entry:27954 Library:NIST20M2.lib
 SI:70 Formula:C24H48O3Si3 CAS:0-00-0 MolWeight:468 RetIndex:2215
 CompName:Pyrogallol, 3TBDMDS derivative \$\$ Benzene, 1,2,3-tris[(tert-butyl(dimethyl)silyl)oxy]- \$\$ (2,3-Bis[(tert-butyl(dimethyl)silyl)oxy]phenoxy)(tert-b



Hit#:2 Entry:158096 Library:NIST20M1.lib
 SI:70 Formula:C14H24O3Si2 CAS:0-00-0 MolWeight:296 RetIndex:1580
 CompName:3-Methylsalicylic acid, 2TMS derivative \$\$ Benzoic acid, 3-methyl-2-trimethylsilyloxy-, trimethylsilyl ester \$\$ Trimethylsilyl 3-methyl-2-[(trim

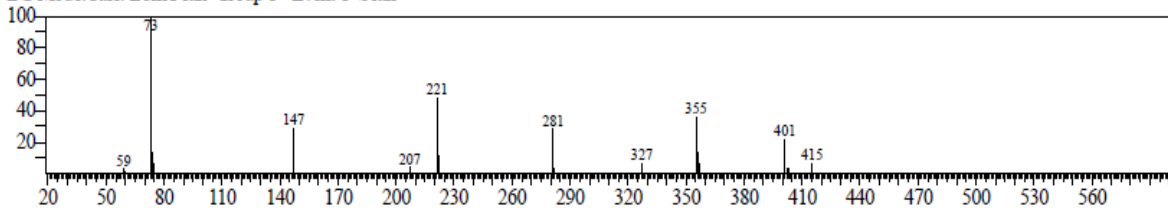


Hit#:3 Entry:16767 Library:NIST20M1.lib
 SI:70 Formula:C6H12F2Si CAS:40207-81-6 MolWeight:150 RetIndex:459
 CompName:Trimethyl(3,3-difluoro-2-propenyl)silane \$\$ (3,3-Difluoro-2-propenyl)(trimethyl)silane #

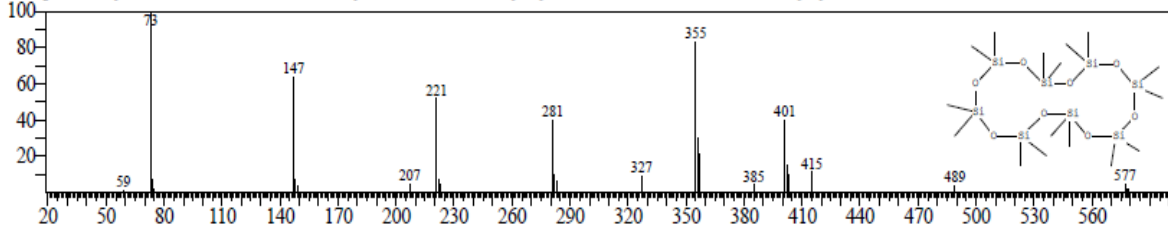


<< Target >>

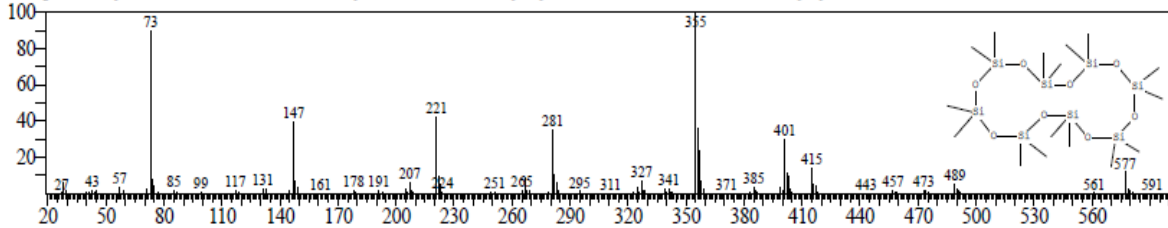
Line#30 R.Time:16.342(Scan#:1542) MassPeaks:19
 RawMode:Averaged 16.333-16.350(1541-1543) BasePeak:73.05(12138)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



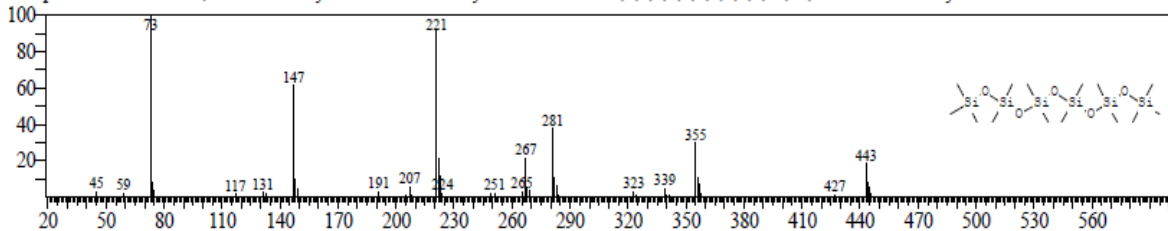
Hit#1 Entry:43507 Library:NIST20R.lib
 SI:84 Formula:C16H48O8Si8 CAS:556-68-3 MolWeight:592 RefIndex:1654
 CompName:Cyclooctasiloxane, hexadecamethyl- \$\$ Hexadecamethyl-cyclooctasiloxane \$\$ Hexadecamethylcyclooctasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12



Hit#2 Entry:42384 Library:NIST20M2.lib
 SI:78 Formula:C16H48O8Si8 CAS:556-68-3 MolWeight:592 RefIndex:1654
 CompName:Cyclooctasiloxane, hexadecamethyl- \$\$ Hexadecamethyl-cyclooctasiloxane \$\$ Hexadecamethylcyclooctasiloxane \$\$ 2,2,4,4,6,6,8,8,10,10,12,12

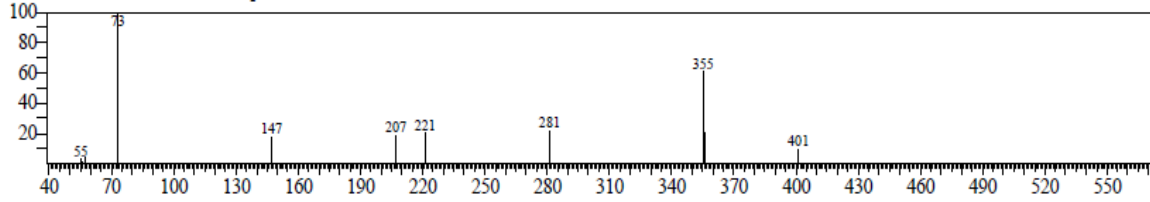


Hit#3 Entry:25143 Library:NIST20M2.lib
 SI:73 Formula:C14H42O5Si6 CAS:107-52-8 MolWeight:458 RefIndex:1252
 CompName:Hexasiloxane, tetradecamethyl- \$\$ Tetradecamethylhexasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,11,11,11-Tetradecamethylhexasiloxane #

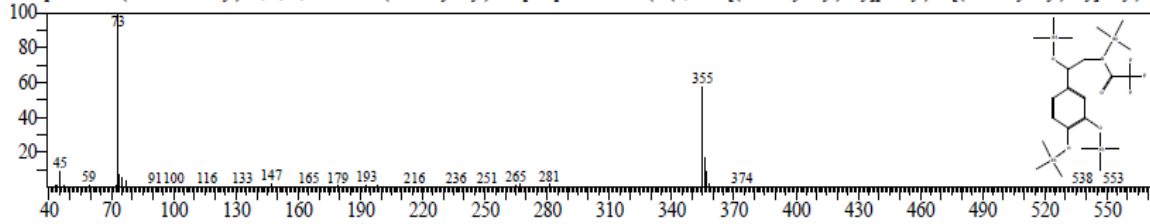


<< Target >>

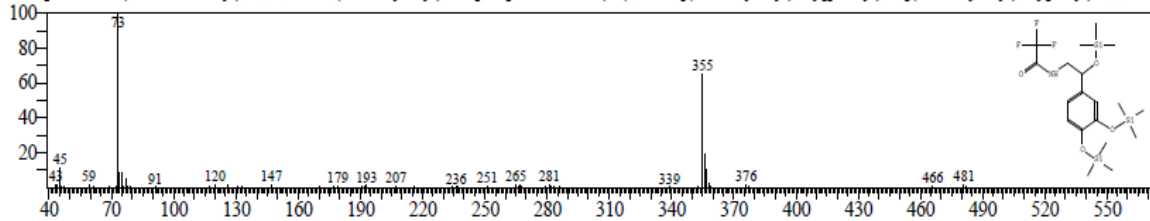
Line#:31 R.Time:16.450(Scan#:1555) MassPeaks:11
 RawMode:Averaged 16.442-16.458(1554-1556) BasePeak:73.05(4334)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



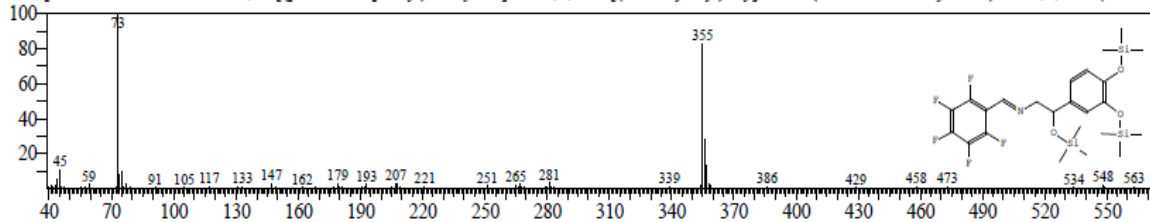
Hit#:1 Entry:40286 Library:NIST20M2.lib
 SI:77 Formula:C22H42F3NO4Si4 CAS:0-00-0 MolWeight:553 RetIndex:2151
 CompName:N-(Trifluoroacetyl)-N,O,O'-tetrakis(trimethylsilyl)norepinephrine



Hit#:2 Entry:30931 Library:NIST20M2.lib
 SI:75 Formula:C19H34F3NO3Si3 CAS:0-00-0 MolWeight:481 RetIndex:2142
 CompName:N-(Trifluoroacetyl)-O,O'-tris(trimethylsilyl)norepinephrine

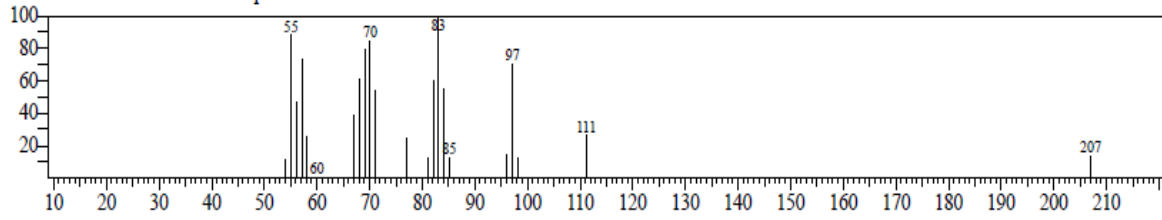


Hit#:3 Entry:40985 Library:NIST20M2.lib
 SI:75 Formula:C24H34F5NO3Si3 CAS:55429-13-5 MolWeight:563 RetIndex:2572
 CompName:Benzenethanamine, N-[(pentafluorophenyl)methylene]-.beta.,3,4-tris(trimethylsilyloxy)-

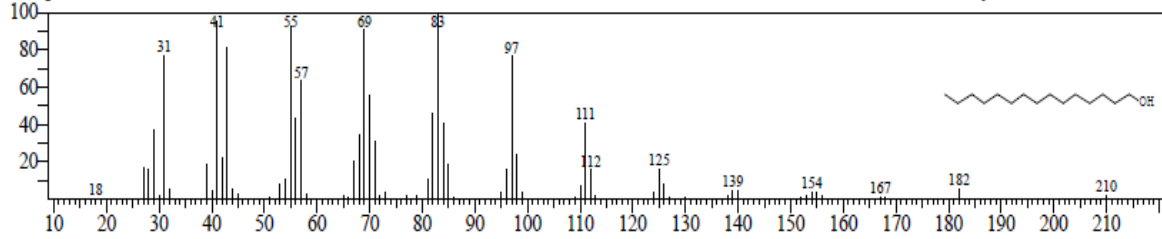


<< Target >>

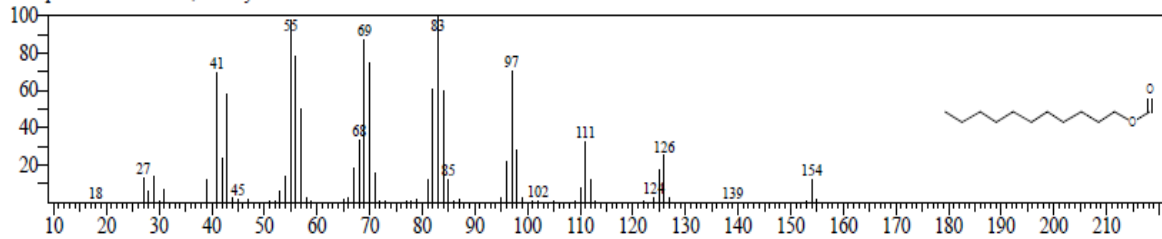
Line#:32 R.Time:16.600(Scan#:1573) MassPeaks:22
 RawMode:Averaged 16.592-16.608(1572-1574) BasePeak:83.10(2875)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



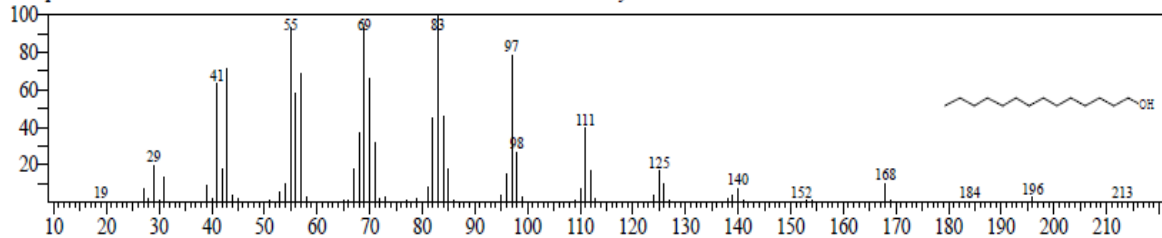
Hit#:1 Entry:28045 Library:NIST20R.lib
 SI:88 Formula:C15H32O CAS:629-76-5 MolWeight:228 RetIndex:1755
 CompName:n-Pentadecanol \$ n-1-Pentadecanol \$ Pentadecanol \$ Neodol 5 \$ 1-Pentadecanol \$ Pentadecan-1-ol \$ Pentadecyl alcohol



Hit#:2 Entry:53462 Library:NIST20M1.lib
 SI:88 Formula:C12H24O2 CAS:0-00-0 MolWeight:200 RetIndex:1478
 CompName:Formic acid, undecyl ester

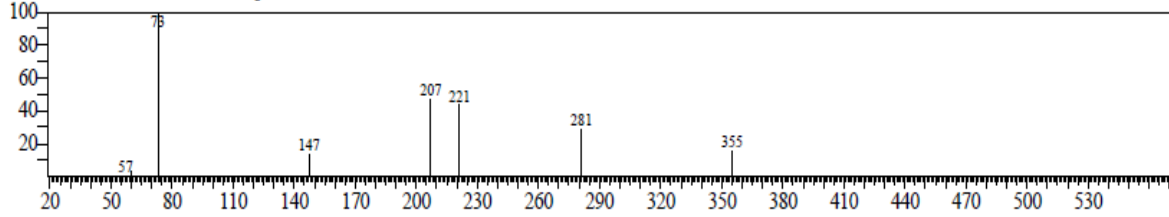


Hit#:3 Entry:25698 Library:NIST20R.lib
 SI:87 Formula:C14H30O CAS:112-72-1 MolWeight:214 RetIndex:1656
 CompName:1-Tetradecanol \$ n-Tetradecan-1-ol \$ n-Tetradecanol \$ n-Tetradecyl alcohol \$ Alfol 14 \$ Lanette K \$ Lanette Wax KS \$ Loxanol V \$ 1

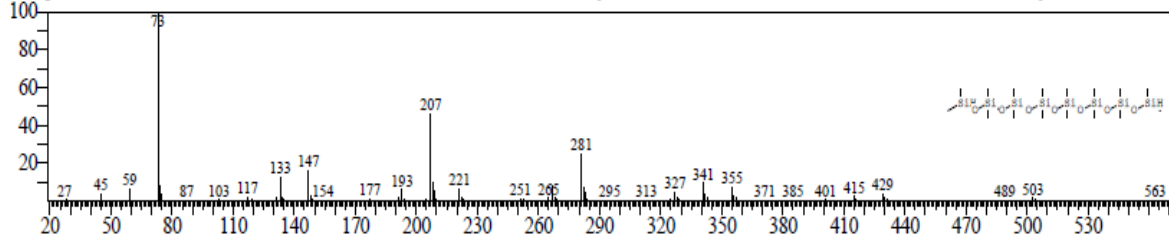


<< Target >>

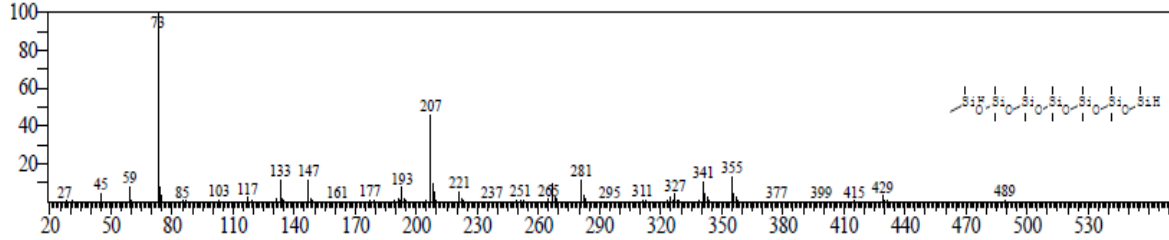
Line#:33 R.Time:16.683(Scan#:1583) MassPeaks:8
 RawMode:Averaged 16.675-16.692(1582-1584) BasePeak:73.10(2557)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



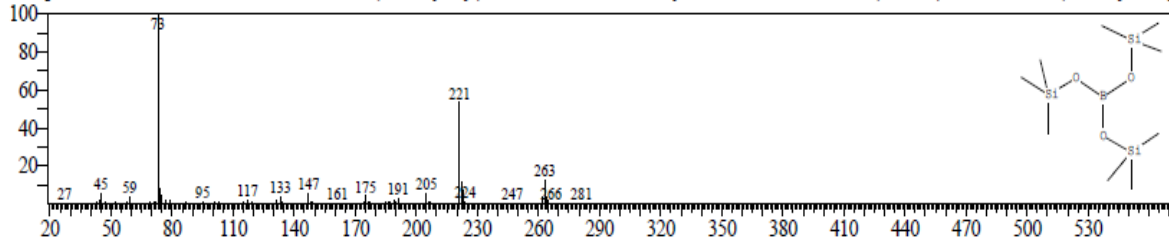
Hit# 1 Entry:41754 Library:NIST20M2.lib
 SI:71 Formula:C16H50O7Si8 CAS:19095-24-0 MolWeight:578 RetIndex:1710
 CompName:Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl- \$\$ 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-Hexadecamethyloctasiloxane #



Hit# 2 Entry:35106 Library:NIST20M2.lib
 SI:71 Formula:C14H44O6Si7 CAS:19095-23-9 MolWeight:504 RetIndex:1526
 CompName:Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13-tetradecamethyl- \$\$ 1,1,3,3,5,5,7,7,9,9,11,11,13,13-Tetradecamethylheptasiloxane #

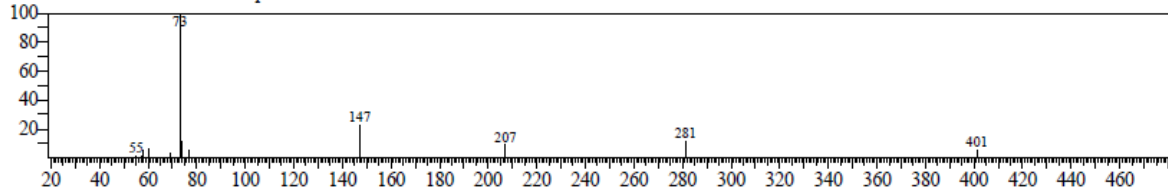


Hit# 3 Entry:33789 Library:NIST20R.lib
 SI:64 Formula:C9H27BO3Si3 CAS:4325-85-3 MolWeight:278 RetIndex:0
 CompName:Boric acid, 3TMS derivative \$\$ Tris(trimethylsilyl)borate \$\$ Silanol, trimethyl-, triester with boric acid (H3BO3) \$\$ Borane, tris(trimethylsiloxy

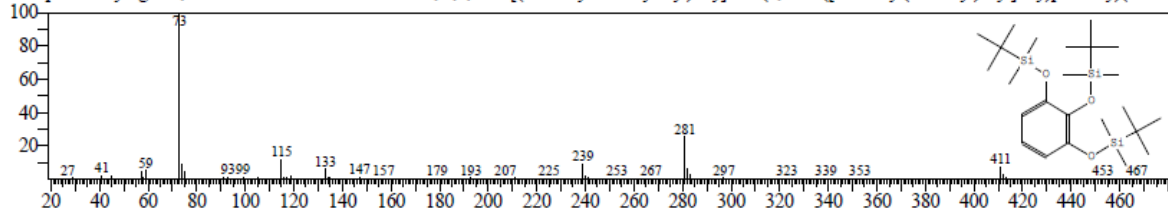


<< Target >>

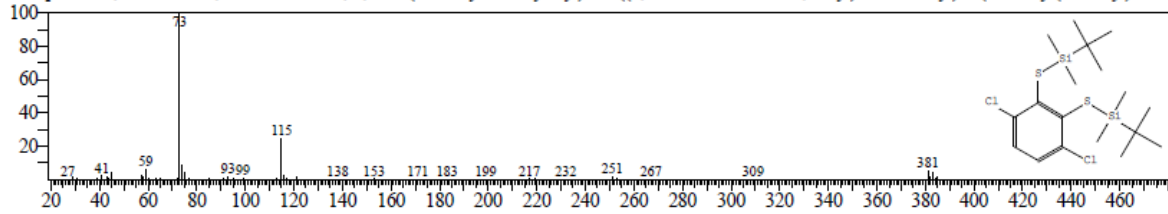
Line#:34 R.Time:17.350(Scan#:1663) MassPeaks:12
 RawMode:Averaged 17.342-17.358(1662-1664) BasePeak:73.10(6916)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



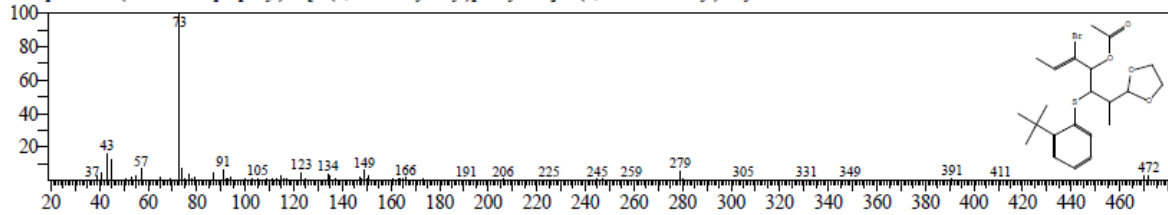
Hit#:1 Entry:27954 Library:NIST20M2.lib
 SI:69 Formula:C24H48O3Si3 CAS:0-00-0 MolWeight:468 RetIndex:2215
 CompName:Pyrogallol, 3TBDMS derivative \$\$(2,3-Bis([tert-butyl(dimethyl)silyl]oxy)phenoxy)(tert-butyl)



Hit#:2 Entry:18248 Library:NIST20M2.lib
 SI:68 Formula:C18H32Cl2S2Si2 CAS:0-00-0 MolWeight:438 RetIndex:2413
 CompName:3,6-Dichloro-1,2-benzenedithiol, S,S'-bis(tert-butyl(dimethyl)silyl)- \$\$(3,6-Dichlorobenzene-1,2-diyl)disulfaneyl)bis(tert-butyl(dimethyl)silane)

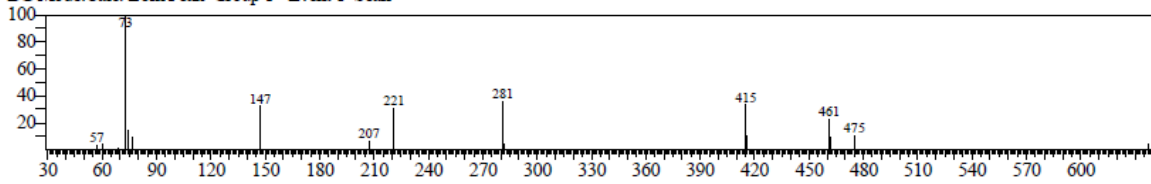


Hit#:3 Entry:28527 Library:NIST20M2.lib
 SI:65 Formula:C22H31BrO4S CAS:0-00-0 MolWeight:470 RetIndex:2941
 CompName:1-(1-Bromo-1-propenyl)-2-[2-(1,1-dimethylethyl)phenylthio]-3-(1,3-dioxolan-2-yl)butyl ethanoate

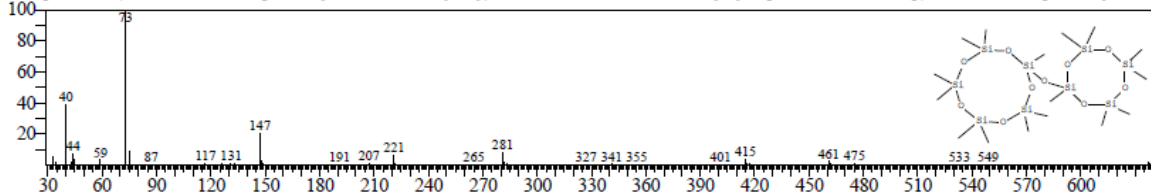


<< Target >>

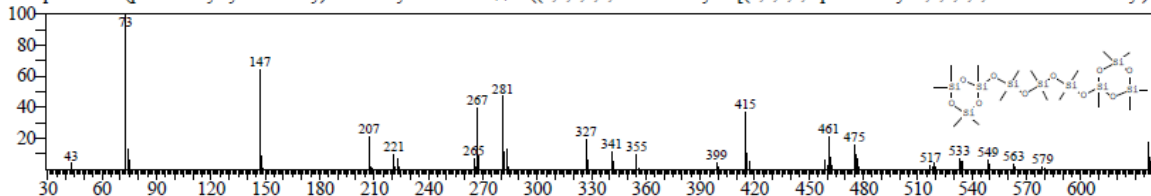
Line#:35 R.Time:17.458(Scan#:1676) MassPeaks:17
 RawMode:Averaged 17.450-17.467(1675-1677) BasePeak:73.05(8192)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



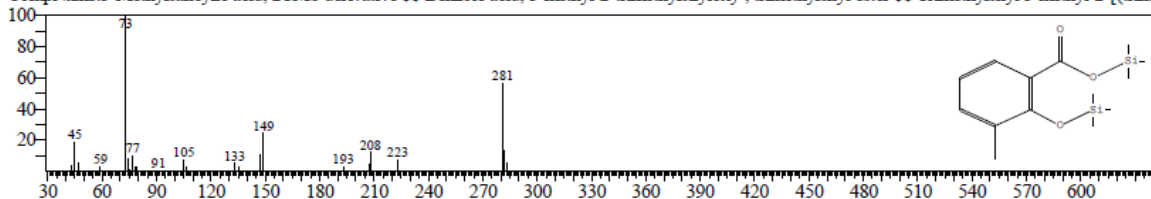
Hit#:1 Entry:44273 Library:NIST20M2.lib
 SI:73 Formula:C16H48O10Si9 CAS:145344-72-5 MolWeight:652 RefIndex:1716
 CompName:2-(2',4,4',6',6',8',8'-Heptamethyltetrasiloxan-2'-yloxy)-2,4,4,6,6,8,8,10,10-nonamethylcyclopentasiloxane



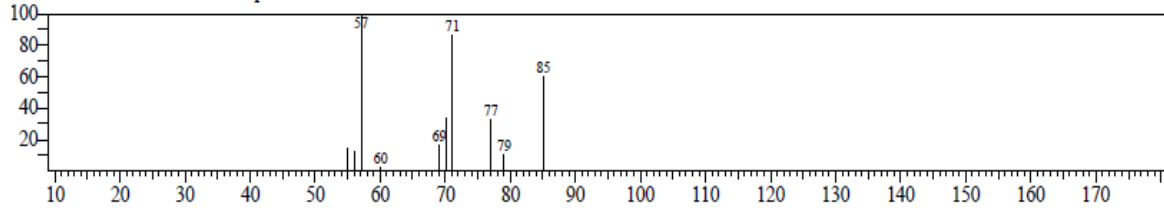
Hit#:2 Entry:44274 Library:NIST20M2.lib
 SI:67 Formula:C16H48O10Si9 CAS:18142-95-5 MolWeight:652 RefIndex:1650
 CompName:Bis(pentamethylcyclotrisiloxy)hexamethyltrisiloxane



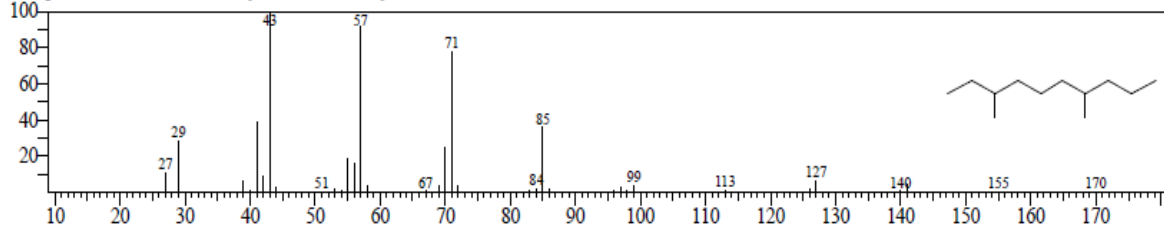
Hit#:3 Entry:158096 Library:NIST20M1.lib
 SI:61 Formula:C14H24O3Si2 CAS:0-00-0 MolWeight:296 RefIndex:1580
 CompName:3-Methylsalicylic acid, 2TMS derivative



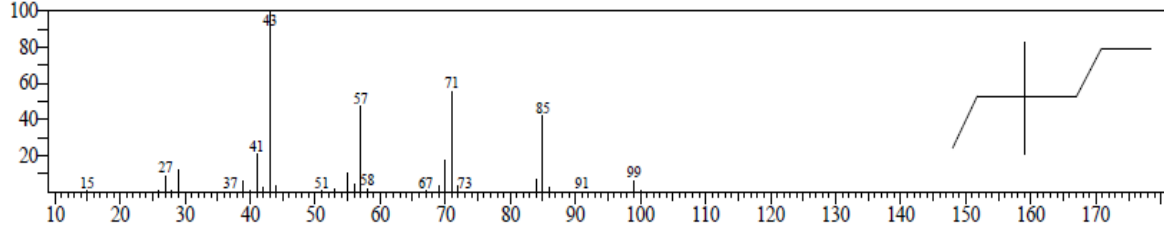
<< Target >>
 Line#:36 R.Time:18.225(Scan#:1768) MassPeaks:10
 RawMode:Averaged 18.217-18.233(1767-1769) BasePeak:57.10(3414)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



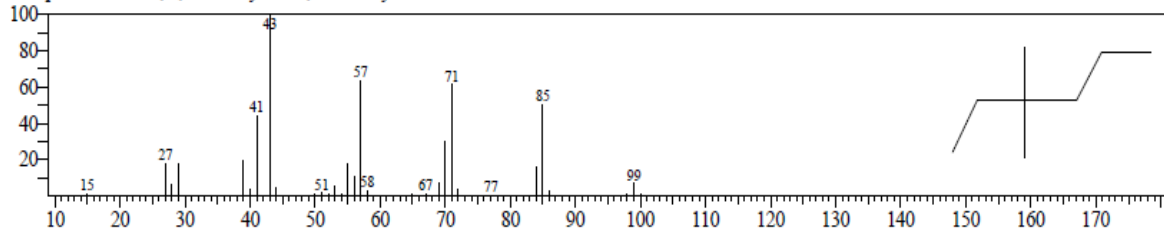
Hit#1 Entry:30059 Library:NIST20M1.lib
 SI:87 Formula:C12H26 CAS:17312-54-8 MolWeight:170 RefIndex:1086
 CompName:Decane, 3,7-dimethyl- \$\$ 3,7-Dimethyldecane #



Hit#2 Entry:4115 Library:NIST20R.lib
 SI:86 Formula:C8H18 CAS:563-16-6 MolWeight:114 RefIndex:732
 CompName:Hexane, 3,3-dimethyl- \$\$ 3,3-Dimethylhexane

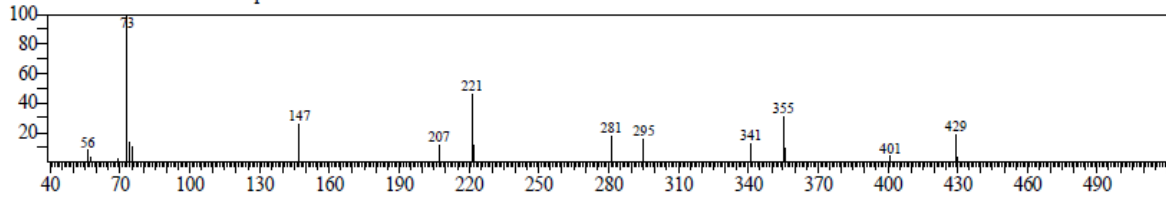


Hit#3 Entry:4539 Library:NIST20M1.lib
 SI:85 Formula:C8H18 CAS:563-16-6 MolWeight:114 RefIndex:732
 CompName:Hexane, 3,3-dimethyl- \$\$ 3,3-Dimethylhexane

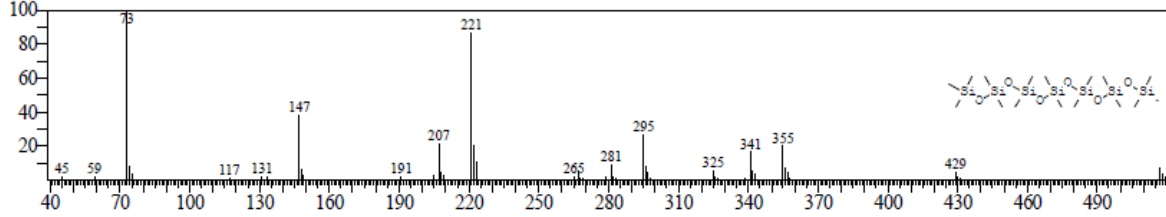


<< Target >>

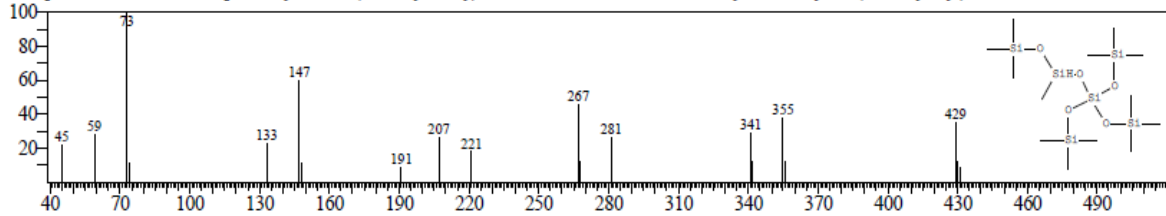
Line#:37 R.Time:18.475(Scan#:1798) MassPeaks:18
 RawMode:Averaged 18.467-18.483(1797-1799) BasePeak:73.10(10896)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



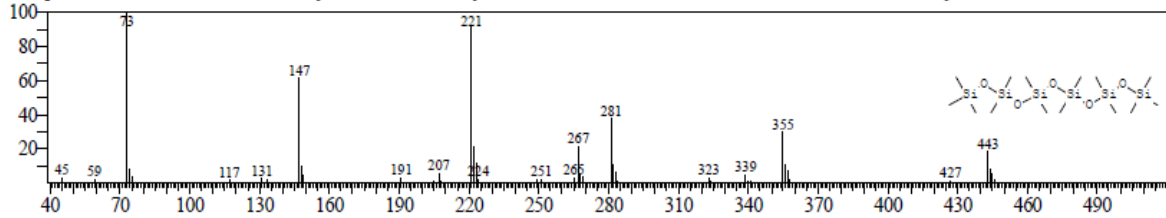
Hit#:1 Entry:38404 Library:NIST20M2.lib
 SI:76 Formula:C16H48O6Si7 CAS:541-01-5 MolWeight:532 RetIndex:1437
 CompName:Heptasiloxane, hexadecamethyl- \$\$ Hexadecamethylheptasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,11,11,13,13,13-Hexadecamethylheptasiloxane #



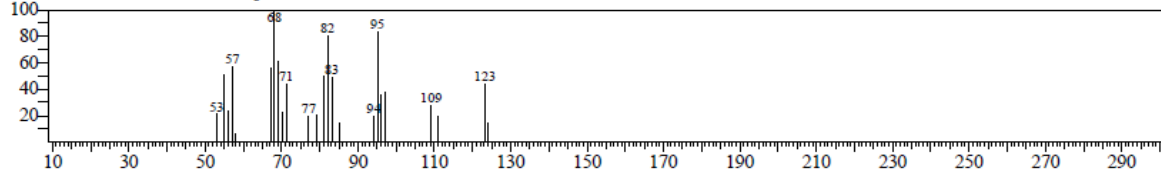
Hit#:2 Entry:20636 Library:NIST20M2.lib
 SI:68 Formula:C13H40O5Si6 CAS:38147-00-1 MolWeight:444 RetIndex:1297
 CompName:1,1,1,5,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane \$\$ 1,3,3,3-Tetramethyldisiloxanyl tris(trimethylsilyl) orthosilicate #



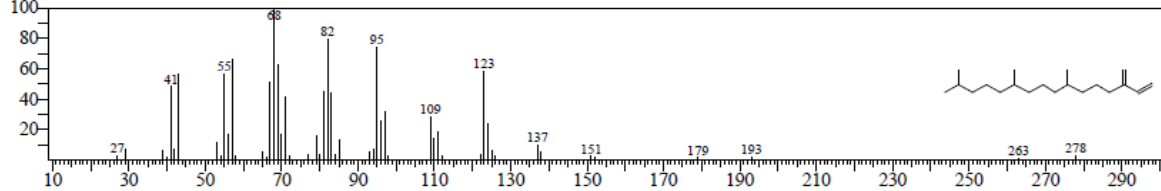
Hit#:3 Entry:25143 Library:NIST20M2.lib
 SI:68 Formula:C14H42O5Si6 CAS:107-52-8 MolWeight:458 RetIndex:1252
 CompName:Hexasiloxane, tetradecamethyl- \$\$ Tetradecamethylhexasiloxane \$\$ 1,1,1,3,3,5,5,7,7,9,9,11,11,11-Tetradecamethylhexasiloxane #



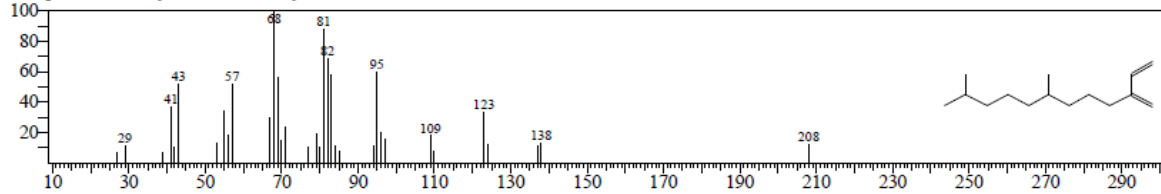
<< Target >>
 Line#:38 R.Time:18.742(Scan#:1830) MassPeaks:24
 RawMode:Averaged 18.733-18.750(1829-1831) BasePeak:68.10(5849)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



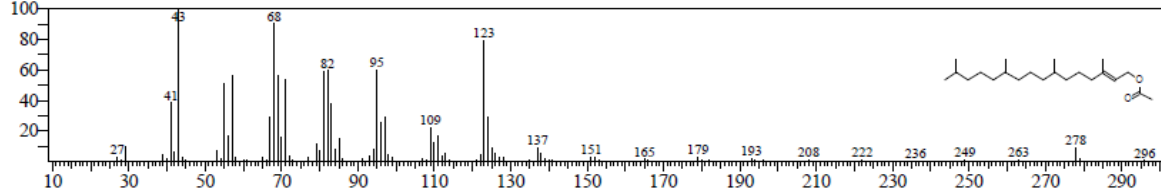
Hit#1 Entry:137561 Library:NIST20M1.lib
 SI:92 Formula:C20H38 CAS:504-96-1 MolWeight:278 RetIndex:1774
 CompName:Neophytadiene \$ 7,11,15-Trimethyl-3-methylenehexadec-1-ene \$ 1-Hexadecene, 7,11,15-trimethyl-3-methylene- \$ 1,3-Butadiene, 2-(4,8,12-



Hit#2 Entry:61276 Library:NIST20M1.lib
 SI:88 Formula:C15H28 CAS:0-00-0 MolWeight:208 RetIndex:1341
 CompName:3-Methylene-7,11-dimethyl-1-dodecene

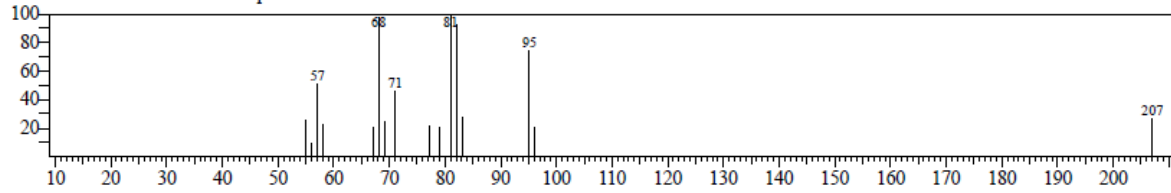


Hit#3 Entry:207682 Library:NIST20M1.lib
 SI:87 Formula:C22H42O2 CAS:10236-16-5 MolWeight:338 RetIndex:2168
 CompName:2-Hexadecen-1-ol, 3,7,11,15-tetramethyl-, acetate, [R-[R*,R*(E)]]-

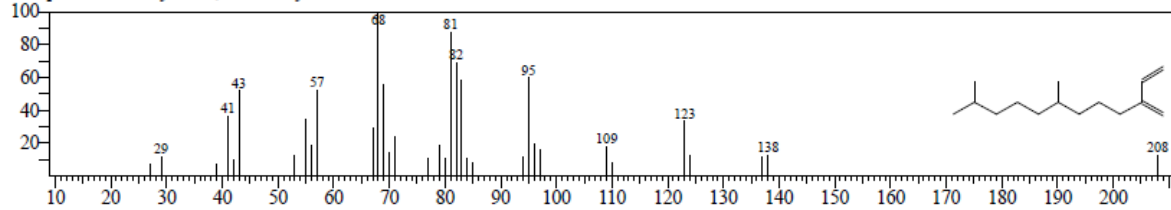


<<Target>>

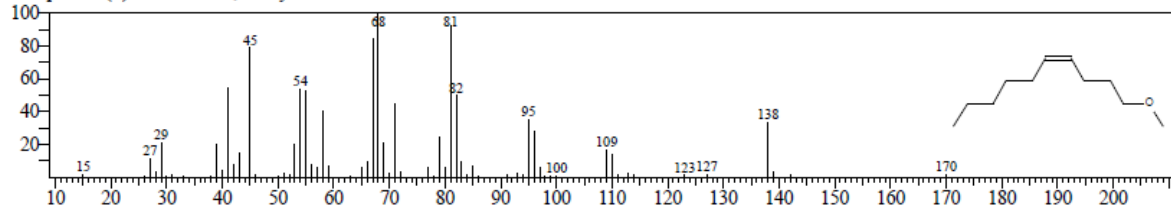
Line#:39 R.Time:19.058(Scan#:1868) MassPeaks:16
 RawMode:Averaged 19.050-19.067(1867-1869) BasePeak:81.00(1644)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



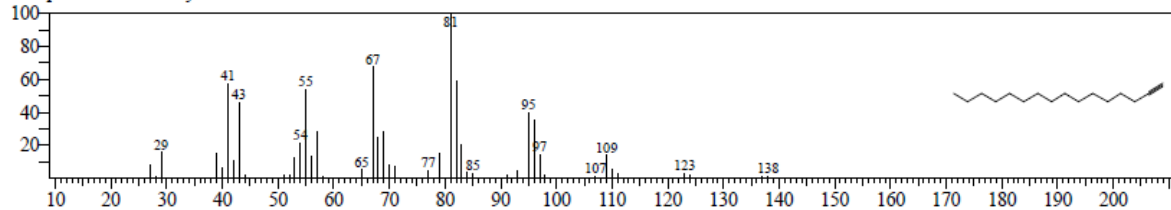
Hit#:1 Entry:61276 Library:NIST20M1.lib
 SI:79 Formula:C15H28 CAS:0-00-0 MolWeight:208 RetIndex:1341
 CompName:3-Methylene-7,11-dimethyl-1-dodecene



Hit#:2 Entry:29979 Library:NIST20M1.lib
 SI:79 Formula:C11H22O CAS:0-00-0 MolWeight:170 RetIndex:1199
 CompName:(Z)-4-Decen-1-ol, methyl ether

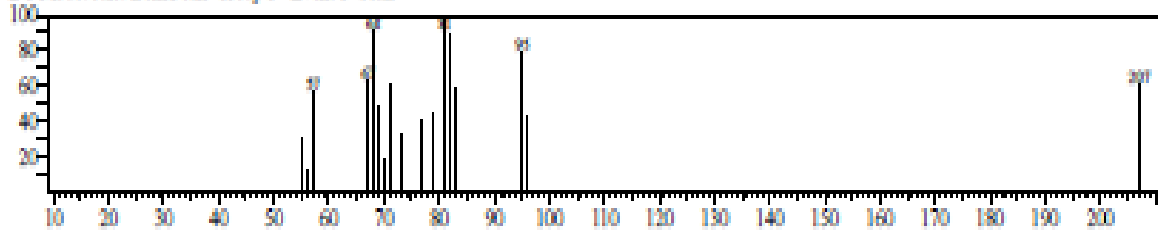


Hit#:3 Entry:27053 Library:NIST20R.lib
 SI:78 Formula:C16H30 CAS:629-74-3 MolWeight:222 RetIndex:1609
 CompName:1-Hexadecyne

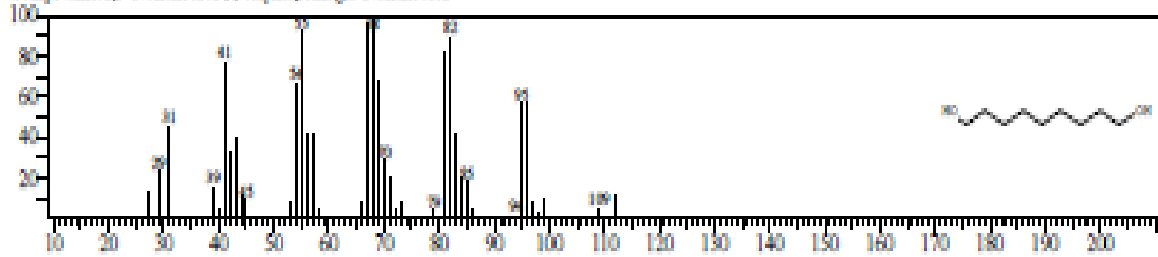


<< Target >>

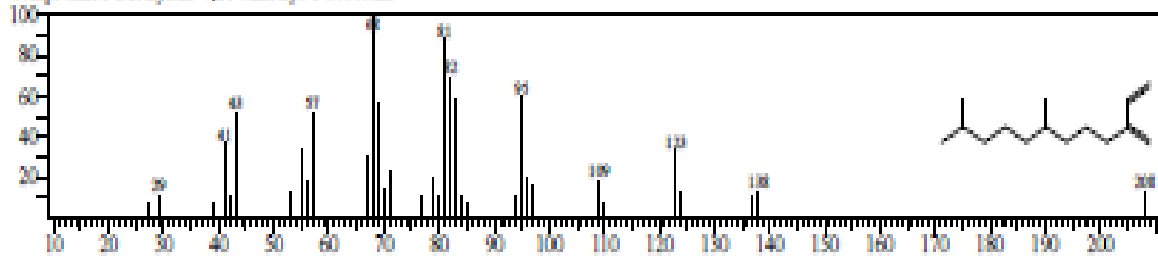
Line#40 R.Time:19.283(Scan#:1895) MassPeak:17
 RawMode:Averaged 19.275-19.292(1894-1896) BasePeak:81.05(1894)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



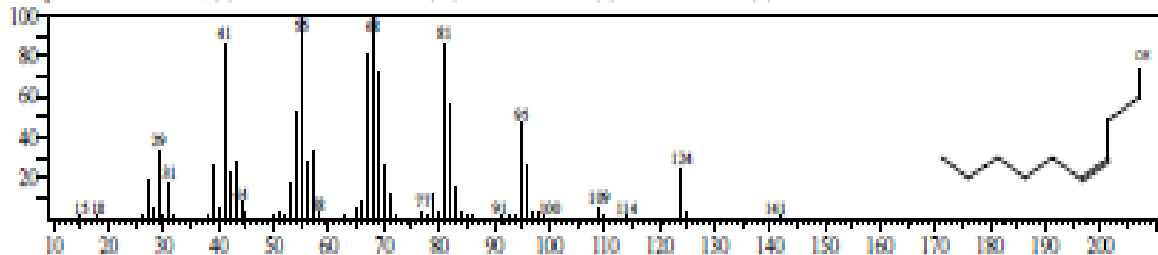
Hit#1 Entry:13591 Library:NIST20R.lib
 SI:80 Formula:C9H20O2 CAS:3937-56-2 MolWeight:160 RefIndex:1401
 CompName:1,9-Nonanediol α, ω -Nonanediol



Hit#2 Entry:61276 Library:NIST20R.lib
 SI:78 Formula:C15H28 CAS:0-00-0 MolWeight:208 RefIndex:1341
 CompName:3-Methyl-7,11-dimethyl-1-dodecene

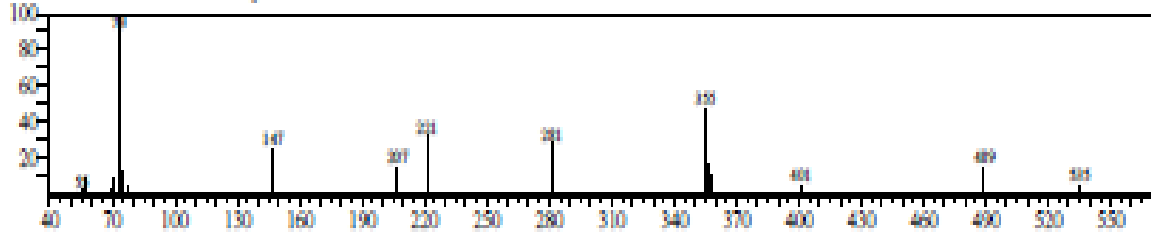


Hit#3 Entry:9400 Library:NIST20R.lib
 SI:78 Formula:C9H18O CAS:10340-23-5 MolWeight:142 RefIndex:1167
 CompName:3-Nonen-1-ol, (Z)- α - β - γ - δ - ϵ - ζ - η - θ - ι - κ - λ - μ - ν - ξ - \omicron - π - ρ - σ - τ - υ - ϕ - χ - ψ - ω

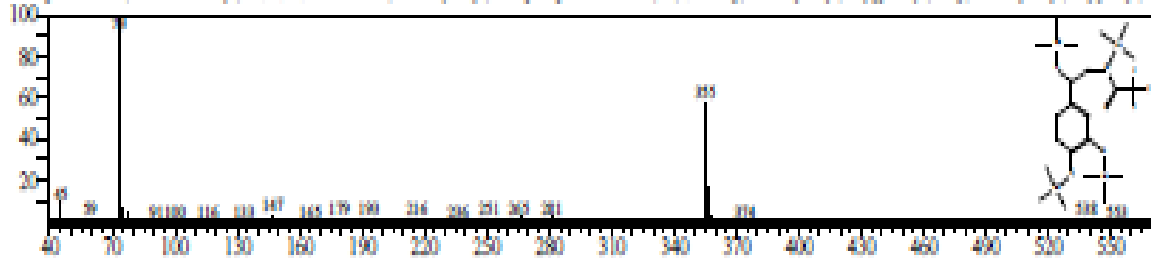


<< Target >>

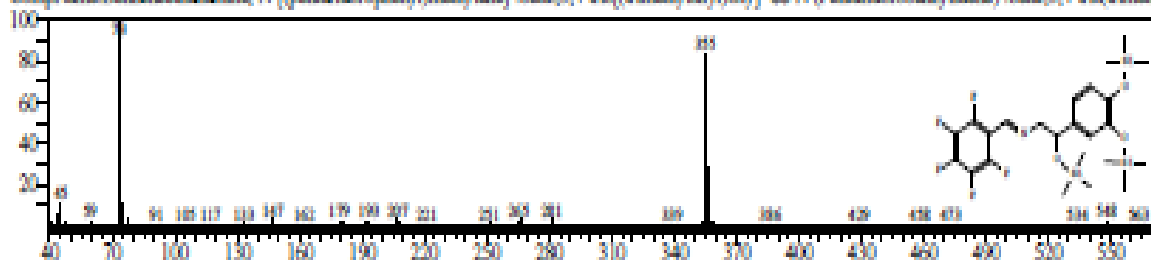
Line#41 R-Time:19.483(Scan#:1919) MassPeak:18
 RawMode:Averaged:19.475-19.492(1918-1920) BasePeak:73.10(9108)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



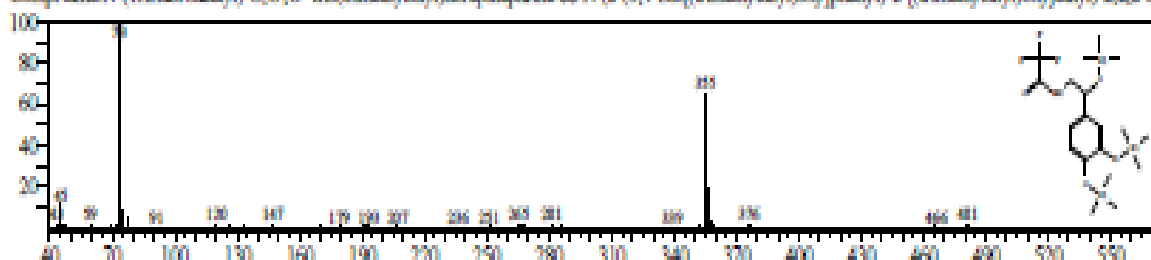
Hit#1 Entry:40286 Library:NIST20M2.lib
 SI:74 Formula:C22H42F3NO4S4 CAS:0400-0 MolWeight:553 RefIndex:2151
 CompName:N-(Trifluoroacetyl)-N,O,O',O'-tetrakis(trimethylsilyl)isorepinephrine \$\$\$ N-(2-(3,4-Bis(trimethylsilyloxy)phenyl)-2-(trimethylsilyloxy)ethyl)-



Hit#2 Entry:40985 Library:NIST20M2.lib
 SI:73 Formula:C24H34F5NO3S3 CAS:55429-13-5 MolWeight:563 RefIndex:2572
 CompName:Benzenmethanamine, N-((pentafluorophenyl)methylamino)-, beta,3,4-tris(trimethylsilyloxy)- \$\$\$ N-(Pentafluorobenzylidene)-beta,3,4-tris(trimethylsilyloxy)-

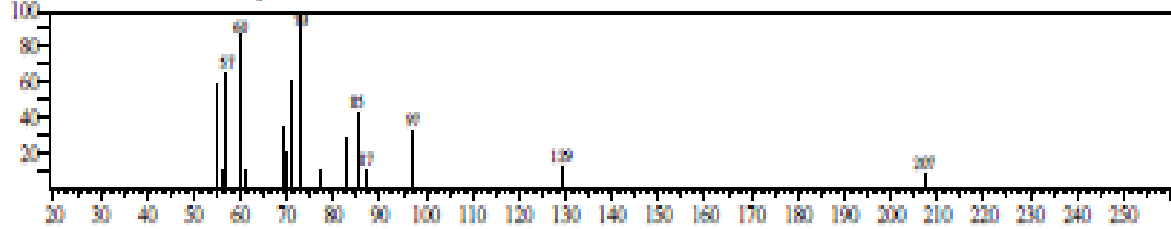


Hit#3 Entry:30931 Library:NIST20M2.lib
 SI:72 Formula:C19H34F3NO4S3 CAS:0400-0 MolWeight:481 RefIndex:2142
 CompName:N-(Trifluoroacetyl)-O,O',O'-tris(trimethylsilyl)isorepinephrine \$\$\$ N-(2-(3,4-Bis(trimethylsilyloxy)phenyl)-2-(trimethylsilyloxy)ethyl)-2,2,2-trifluoro-

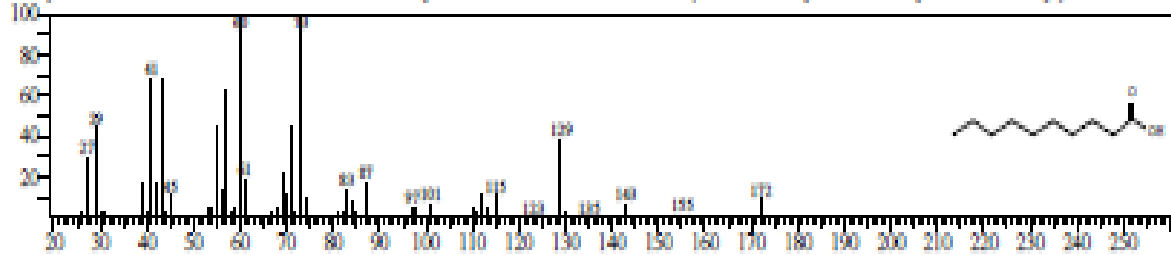


<<Target>>

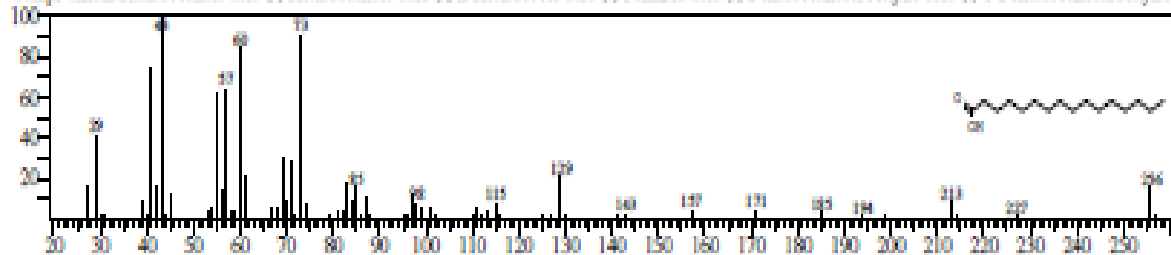
Line#42 R-Time:20.258(Scan#:2012) MassPeaks:16
 RawMode:Averaged 20.250-20.267(2011-2013) BasePeak:73.05(3520)
 E0 Mode:Calc. from Peak Group 1 - Event 1 Scan



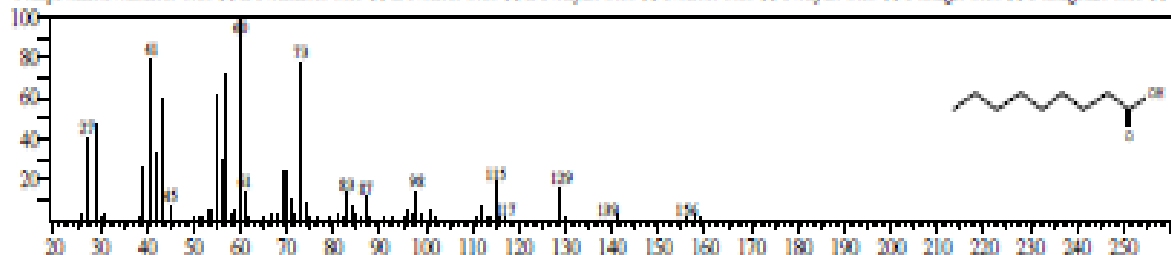
Hit#1 Entry:16527 Library:NIST20R.lib
 SI:81 Formula:C10H20O2 CAS:334-48-5 MolWeight:172 RefIndex:1372
 CompName:Decanoic acid \$\$ Decanoic acid \$\$ n-Capric acid \$\$ n-Decoic acid \$\$ n-Decylic acid \$\$ Capric acid \$\$ Capric acid \$\$ Capric acid \$\$ Capric acid \$\$ De



Hit#2 Entry:112116 Library:NIST20M1.lib
 SI:81 Formula:C16H32O2 CAS:57-10-3 MolWeight:256 RefIndex:1968
 CompName:Hexadecanoic acid \$\$ Hexadecanoic acid \$\$ n-Hexadecanoic acid \$\$ Palmitic acid \$\$ Pentadecanocarboxylic acid \$\$ 1-Pentadecanocarboxylic

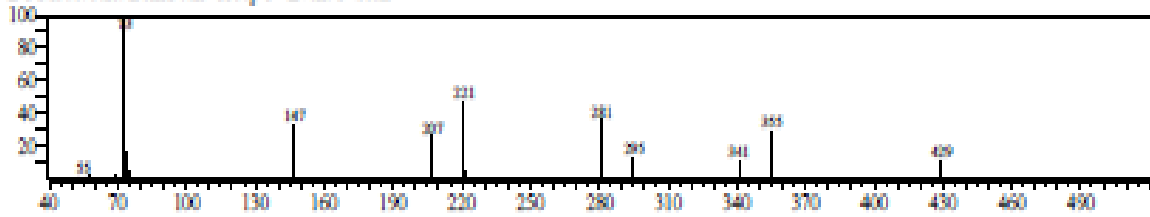


Hit#3 Entry:13186 Library:NIST20R.lib
 SI:80 Formula:C9H18O2 CAS:112-05-0 MolWeight:158 RefIndex:1272
 CompName:Nonanoic acid \$\$ n-Nonanoic acid \$\$ n-Nonoic acid \$\$ n-Nonylic acid \$\$ Nonoic acid \$\$ Nonylic acid \$\$ Pelargic acid \$\$ Pelargonic acid \$\$ 1-

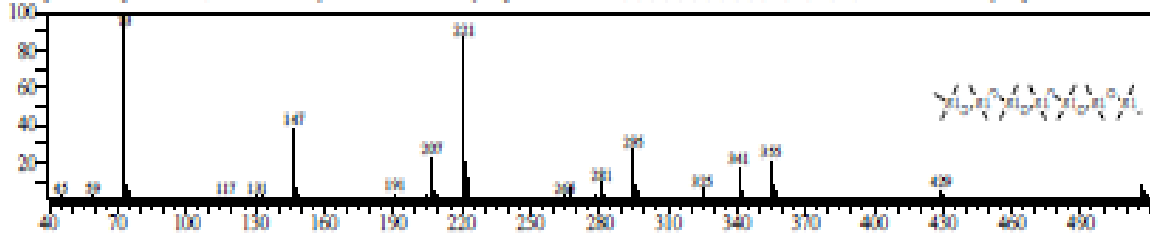


<<Target>>

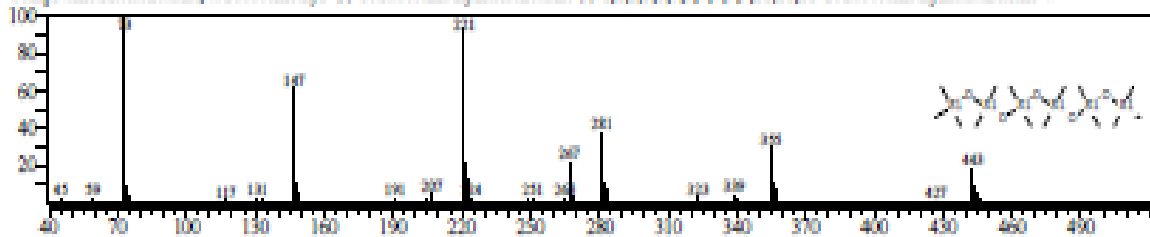
Line#43 R.Time:20.417(Scan#:2031) MassPeak:15
 RawMode:Averaged 20.408-20.425(2030-2032) BasePeak:73.10(7286)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



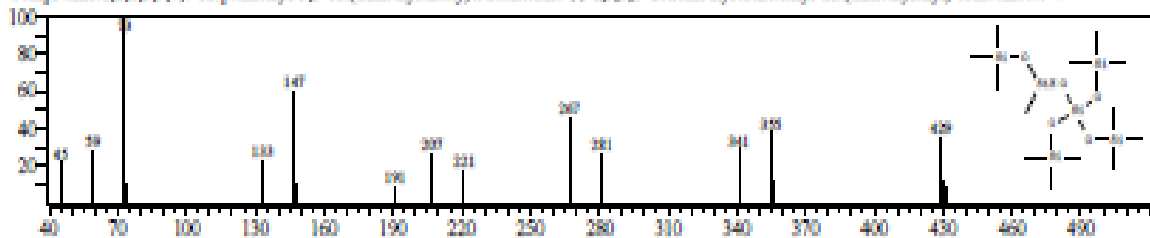
Hit#1 Entry:38404 Library:NIST20M2.lfb
 SI:76 Formula:C16H48O6Si7 CAS:541-01-5 MolWeight:532 RefIndex:1437
 CompName:Heptasiloxane, hexadecamethyl- §§ Hexadecamethylheptasiloxane §§ 1,1,1,3,3,5,5,7,7,9,9,11,11,13,13-Hexadecamethylheptasiloxane #



Hit#2 Entry:25143 Library:NIST20M2.lfb
 SI:70 Formula:C14H42O6Si6 CAS:107-52-8 MolWeight:458 RefIndex:1252
 CompName:Hexasiloxane, tetradecamethyl- §§ Tetradecamethylhexasiloxane §§ 1,1,1,3,3,5,5,7,7,9,9,11,11,11-Tetradecamethylhexasiloxane #

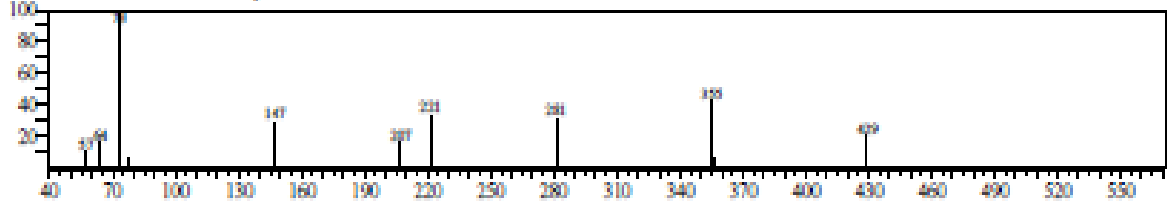


Hit#3 Entry:20636 Library:NIST20M2.lfb
 SI:69 Formula:C13H40O6Si6 CAS:38147-00-1 MolWeight:444 RefIndex:1297
 CompName:1,1,1,5,7,7-Heptamethyl-3,3-bis(trimethylsilyloxy)tetrasiloxane §§ 1,3,3,3-Tetramethylsiloxytri(trimethylsilyl) orthosilicate #

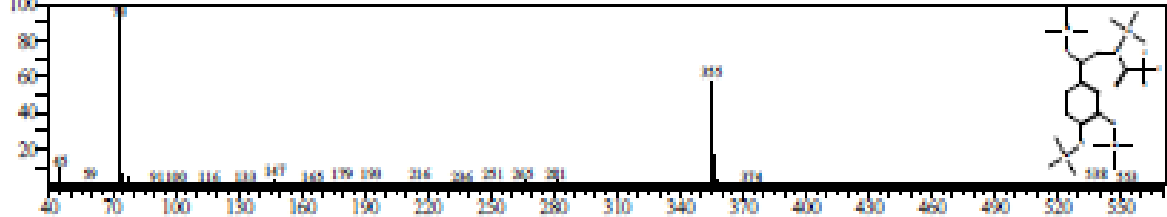


<< Target >>

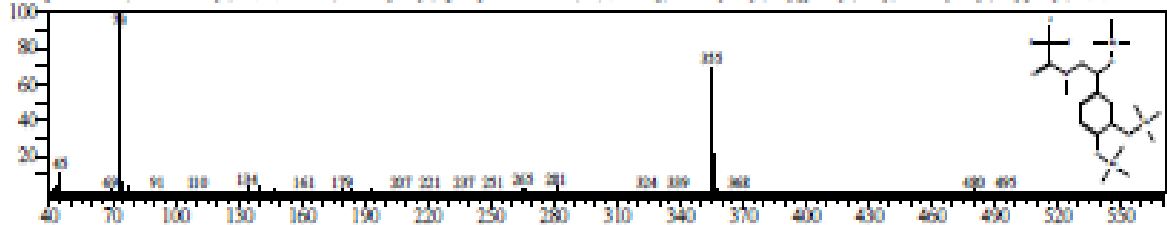
Line#44 R-Time:21.317(Scan#:2139) MassPeaks:11
 RawMode:Averaged 21.308-21.325(2138-2140) BasePeak:73.10(5763)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



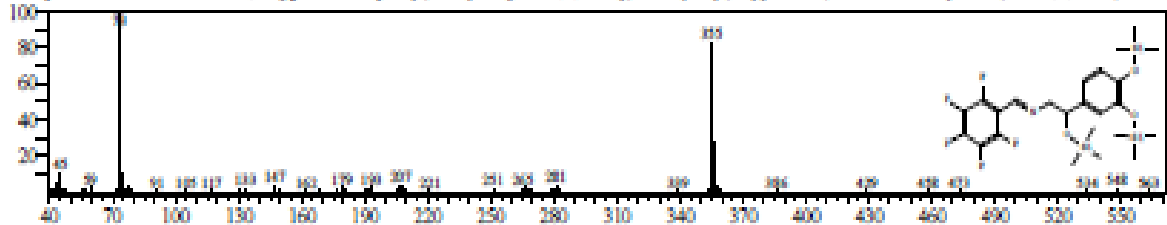
Hit#1 Entry:40286 Library:NIST20M2.lfb
 SI:68 Formula:C22H42F3NO4S4 CAS:0-00-0 MolWeight:553 RetIndex:2151
 CompName:N-(Trifluoroacetyl)-N,O,O'-tetra(is(trimethylsilyloxy)oxy)quinoprine



Hit#2 Entry:33639 Library:NIST20M2.lfb
 SI:67 Formula:C20H34F3NO4S3 CAS:54135-51-2 MolWeight:495 RetIndex:2042
 CompName:N-(Trifluoroacetyl)-O,O',O'-tris(is(trimethylsilyloxy)oxy)quinoprine

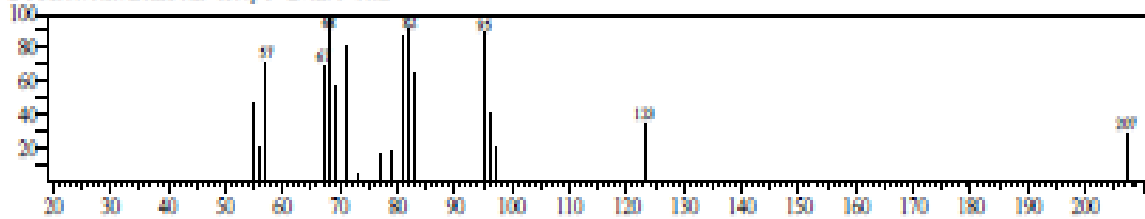


Hit#3 Entry:40985 Library:NIST20M2.lfb
 SI:67 Formula:C24H34F5NO3S3 CAS:55429-13-5 MolWeight:563 RetIndex:2572
 CompName:Benzenesulfonamide, N-[(pentafluorophenyl)methyl]-, beta, 3,4-bis(is(trimethylsilyloxy)-) N-(Pentafluorobenzylidene)-, beta, 3,4-bis(is(trimethylsilyloxy)-)

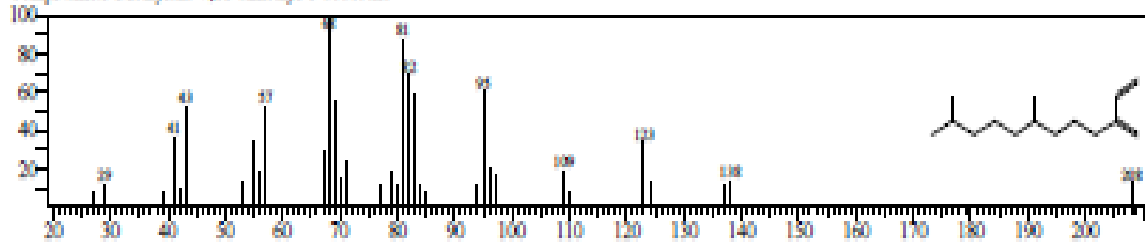


<<Target>>

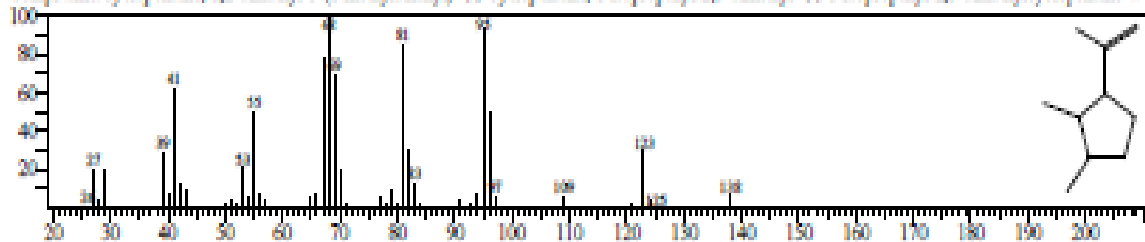
Line#45 R-Time:22.067(Scan# 2229) MassPeaks:18
 RawMode:Averaged 22.058-22.075(2228-2230) BasePeak:68.05(2012)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



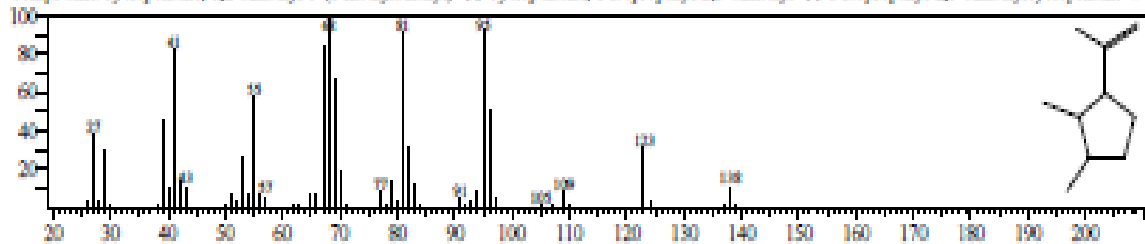
Hit#1 Entry:61276 Library:NIST20M11b
 SI:84 Formula:C15H28 CAS:0-00-0 MolWeight:208 RefIndex:1341
 CompName:3-Methylene-7,11-dimethyl-1-undecane



Hit#2 Entry:8646 Library:NIST20M11b
 SI:83 Formula:C10H18 CAS:6983-03-5 MolWeight:138 RefIndex:949
 CompName:Cyclopentane, 1,2-dimethyl-3-(1-methylphenyl)- §§ Cyclopentane, 1-isopropyl-2,3-dimethyl- §§ 1-isopropyl-2,3-dimethylcyclopentane #

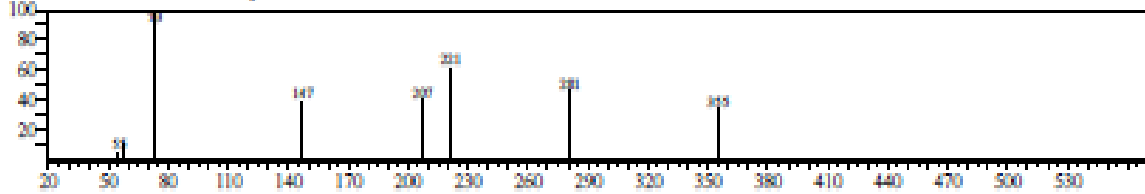


Hit#3 Entry:11649 Library:NIST20M11b
 SI:83 Formula:C10H18 CAS:6983-03-5 MolWeight:138 RefIndex:949
 CompName:Cyclopentane, 1,2-dimethyl-3-(1-methylphenyl)- §§ Cyclopentane, 1-isopropyl-2,3-dimethyl- §§ 1-isopropyl-2,3-dimethylcyclopentane #

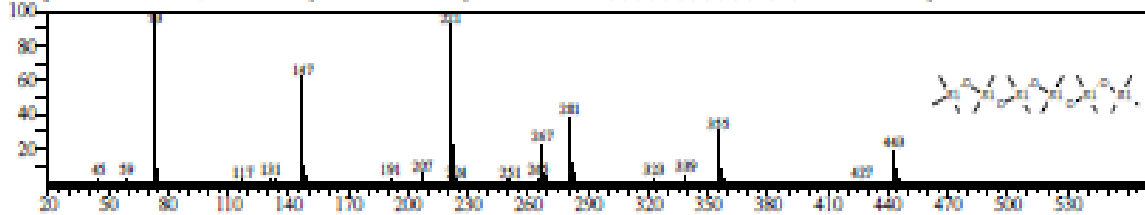


<< Target >>

Line#46 R-Time:22.183(Scan# 2243) MassPeak:9
 RawMode:Averaged 22.175-22.192(2242-2244) BasePeak:73.10(3538)
 BG Mode:Calc. from Peak Group 1 - Event 1 Scan



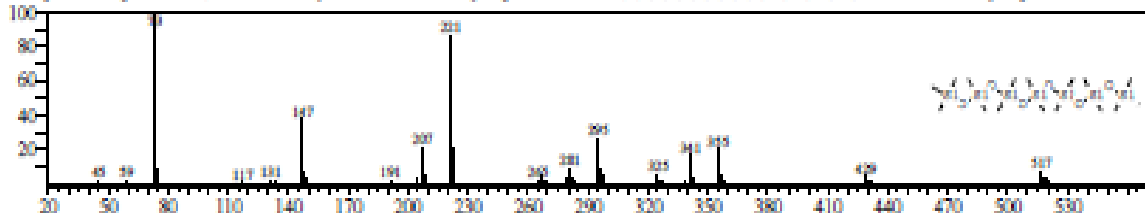
Hit#1 Entry:25143 Library:NIST20M2.lib
 SI:69 Formula:C14H42O6S16 CAS:107-52-8 MolWeight:458 RefIndex:1252
 CompName:Hexasiloxane, tetradecamethyl- §§ Tetradecamethylhexasiloxane §§ 1,1,1,3,3,5,5,7,7,9,9,11,11,11-Tetradecamethylhexasiloxane #



Hit#2 Entry:41754 Library:NIST20M2.lib
 SI:67 Formula:C16H50O7S18 CAS:19095-24-0 MolWeight:578 RefIndex:1710
 CompName:Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl- §§ 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-Hexadecamethyloctasiloxane #



Hit#3 Entry:38404 Library:NIST20M2.lib
 SI:67 Formula:C16H48O6S17 CAS:541-01-5 MolWeight:532 RefIndex:1437
 CompName:Heptasiloxane, hexadecamethyl- §§ Hexadecamethylheptasiloxane §§ 1,1,1,3,3,5,5,7,7,9,9,11,11,13,13,13-Hexadecamethylheptasiloxane #

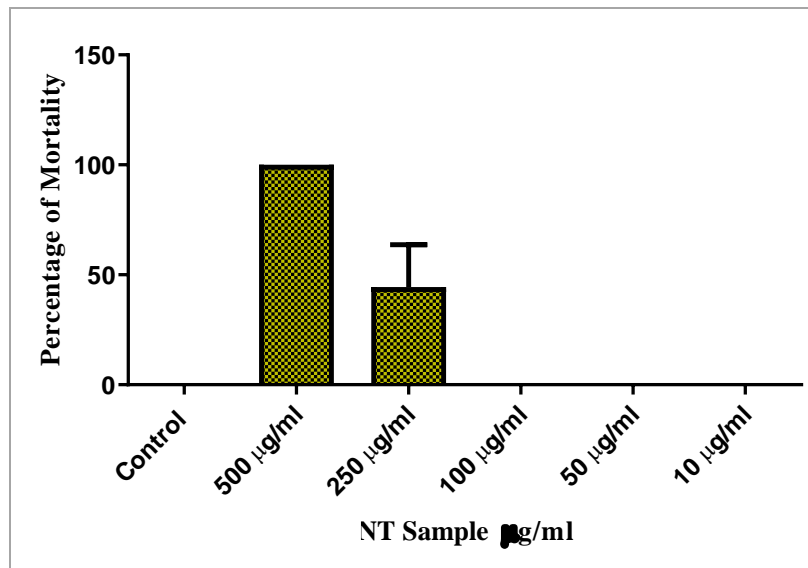


ANTHELMINTIC ACTIVITY

Name of the sample	500 µg/ml		250 µg/ml		100 µg/ml		50 µg/ml		10 µg/ml		Control	
	D	L	D	L	D	L	D	L	D	L	L	D
Ethanollic extract of <i>Abelmoschus esculentus</i> L	3	0	2	1	0	3	0	3	0	3	3	0
	3	0	1	2	0	3	0	3	0	3	3	0
	3	0	1	2	0	3	0	3	0	3	3	0

Percentage of mortality

Name of the sample	500 µg/ml	250 µg/ml	100 µg/ml	50 µg/ml	10 µg/ml	Control
Ethanollic extract of <i>Abelmoschus esculentus</i> L	100	66.6	0	0	0	0
	100	33.33	0	0	0	0
	100	33.33	0	0	0	0



CONCLUSION

The leaves of *Abelmoschus esculentus*.Linn. have been studied to give detailed reports on their Phytochemical Screening and anthelmintic activity.

Preliminary physico chemical studies confirmed the purity of the drug.

The phytochemical investigation of extract showed that the presence of **Alkaloids, Flavonoids, Terpenoids, Anthraquinone Glycoside, Phenolic compounds, Saponins.**

The Gas Chromatography Mass Spectroscopy studies of extract have shown the presence of **46 components.**

The Thin Layer Chromatography (TLC) Studies of extract have shown **Rf value of extract is 0.8**

The anthelmintic activity was carried out by **earthworm inhibition method.**

The results indicate that as the concentration of the extract increased, the percentage of earthworm inhibition also **increased**, demonstrating its potential as an anti-helmintic agent.

At the highest concentration (500 µg/mL), the ethanolic extract achieved **100% inhibition**.

At the concentration **250 µg/mL the ethanolic extract achieved 33.3% inhibition**.

Other concentration **100 µg/mL, 50 µg/mL, 10 µg/mL & control has 0% inhibition**.

These findings suggest that the ethanolic extract of *Abelmoschus esculentus* possesses significant earthworm inhibitory activity.

Future prospects for the research on the identified medicinal plants include conducting well-designed clinical trials to establish their efficacy and safety in humans, isolating specific bioactive compounds to understand their mechanisms of action, and developing various dosage forms to enhance patient compliance. Investigating synergistic effects of combined plant extracts, ensuring sustainable harvesting practices, and enhancing bioavailability of active compounds are critical next steps.

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