



Solvents & Chemicals

Alcohols



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Alcohols are used to form many important components in many commercial products. The lower alcohols are employed as solvents and antifreezes. Esters of the alcohols are employed extensively as solvents for lacquers, paints, varnishes, inks, and adhesives. The plasticizer-range alcohols find their primary use in the form of esters as plasticizers and also as lubricants in high-speed applications such as jet engines. The detergent-range alcohols are used in the form of sulfate esters in detergents and surfactants. Because the analysis of alcohols is so far reaching the DPS Alcohols GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to detect all of these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC Systems for analyses right where the samples are taken. The fully integrated Alcohols GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

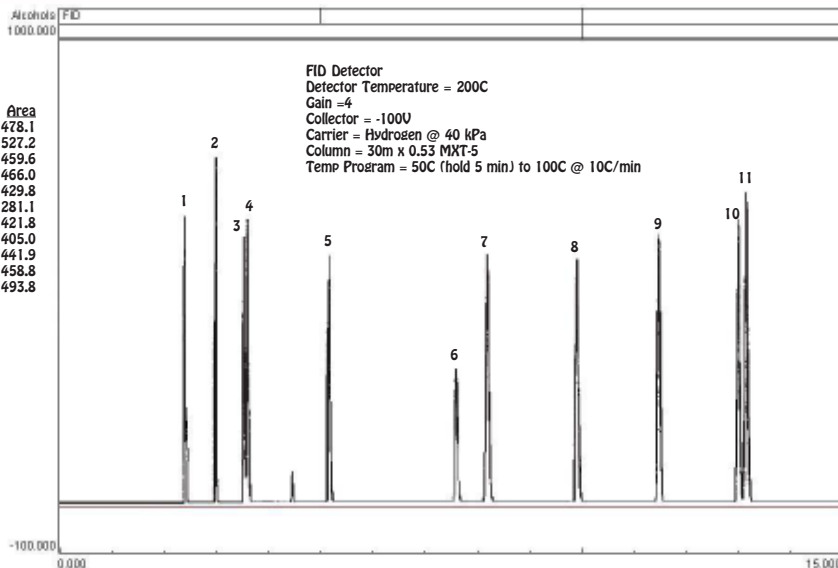
- 600-C-111 - Series 600 Alcohols GC Analyzer (FID, 30m)
- 500-C-111 - Companion 1 Portable Alcohols GC Analyzer (FID, 30m)

Alcohols



Companion 1 Portable GC

Peak	Component	Area
1	Methanol	478.1
2	Ethanol	527.2
3	Acetone	459.6
4	Isopropanol	466.0
5	1-Propanol	429.8
6	Ethyl Acetate	281.1
7	2-Methyl-1-Propanol	421.8
8	1-Butanol	405.0
9	3-Pentanol	441.9
10	3-Methyl-1-Butanol	458.8
11	2-Methyl-1-Butanol	493.8



11/2015 Specifications may change without notice.



Solvents & Chemicals

Glycols



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Ethylene glycol is the simplest and most common of the class of glycols and is used as antifreeze in cooling and heating systems. The next larger compound is propylene glycol, which is similar to ethylene glycol but not toxic, and is used extensively in foods, cosmetics, and oral hygiene products as a solvent, preservative, and moisture-retaining agent. As you go up in size, other important glycols are used as raw materials for plastics and other chemicals, insect repellents, and even tranquilizers. Glycols are used in so many industries that the need for analysis has dramatically increased. To meet this need, the DPS Glycols GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Glycols GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

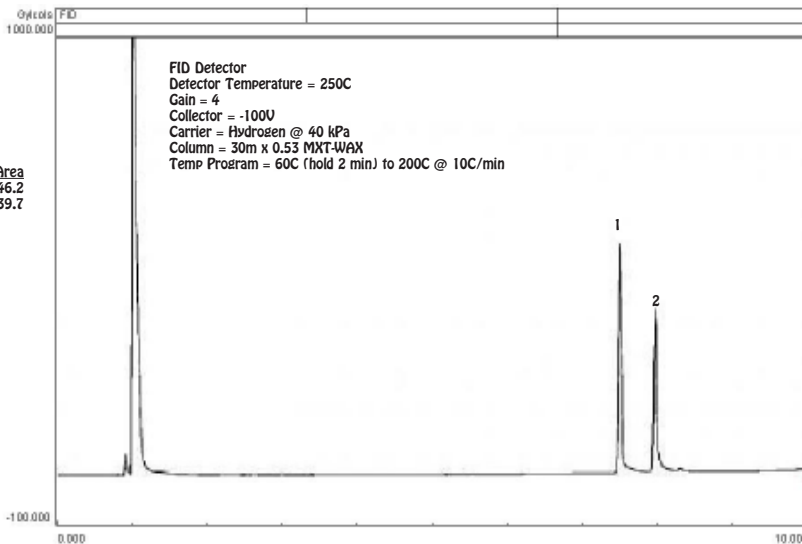
- 600-C-118 - Series 600 Glycols GC Analyzer (FID, 30m)
- 500-C-118 - Companion 1 Portable Glycols GC Analyzer (FID, 30m)



Companion 1 Portable GC

Glycols

Peak	Component	Area
1	Ethylene Glycol	846.2
2	Propylene Glycol	639.7



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Solvents & Chemicals

Formaldehyde



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Formaldehyde is a simple, highly reactive hydrocarbon that is used as a fixative in the pathology laboratory, as a fumigant, disinfectant, in photographic materials, and in the manufacture of foam insulation, cosmetics, drugs, clothing, and furniture. It is also a major toxic component of photochemical smog. Because of its extreme reactivity, even with itself, it cannot be readily isolated or handled in the pure state. Therefore, it is produced and marketed as an aqueous solution. Due to the health concerns arising from exposure to formaldehyde there has been an increasing need for the analysis of this reactive compound. To meet this need, the DPS Formaldehyde GC Systems are configured with the latest designed high resolution capillary column and the Sensitive HID detector to measure water and other impurities in formaldehyde. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Formaldehyde GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

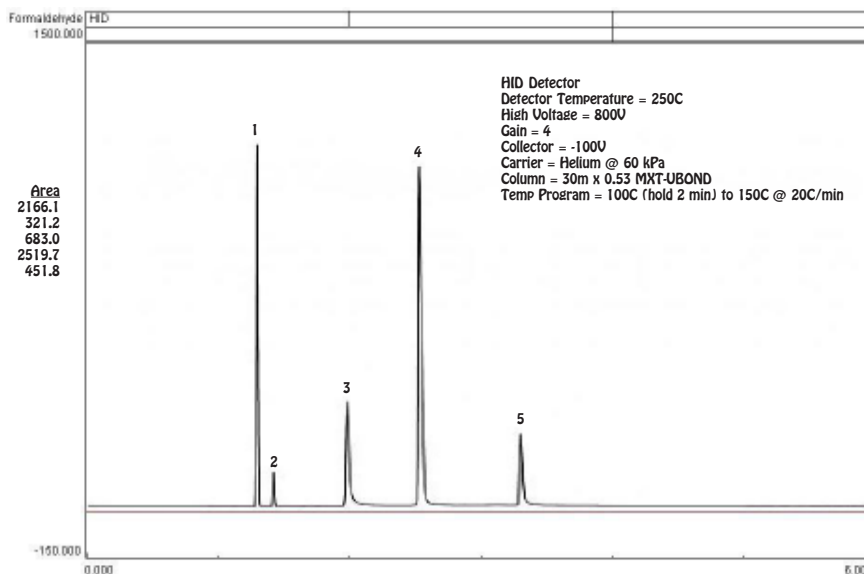
- 600-C-117 - Series 600 Formaldehyde GC Analyzer (HID, 30m)
- 600-C-117 - Companion 1 Portable Formaldehyde GC Analyzer (HID, 30m)

Formaldehyde in Water



Companion 1 Portable GC

Peak	Component	Area
1	Air	2166.1
2	Carbon Dioxide	321.2
3	Formaldehyde	683.0
4	Water	2519.7
5	Methanol	451.8



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Solvents & Chemicals

Aromatics



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Benzene is the most common aromatic hydrocarbon, however several other commercially important aromatics are also produced on a scale of millions of pounds annually. Benzene, toluene, and the xylenes are added to unleaded gasoline to raise the octane number. Other aromatics, derived from the petrochemical industry, are used in products such as polyesters, polyurethanes, polystyrene, synthetic rubber, detergents, pharmaceuticals, flavors, perfumes, plasticizers, and many others. To meet the ever increasing need for the analysis of all of these various aromatic hydrocarbons, the DPS Aromatics GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC Systems for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Aromatics GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Available Configurations Include:

- 600-C-114 - Series 600 Aromatics GC Analyzer (FID, 30m)
- 500-C-114 - Companion 1 Portable Aromatics GC Analyzer (FID, 30m)

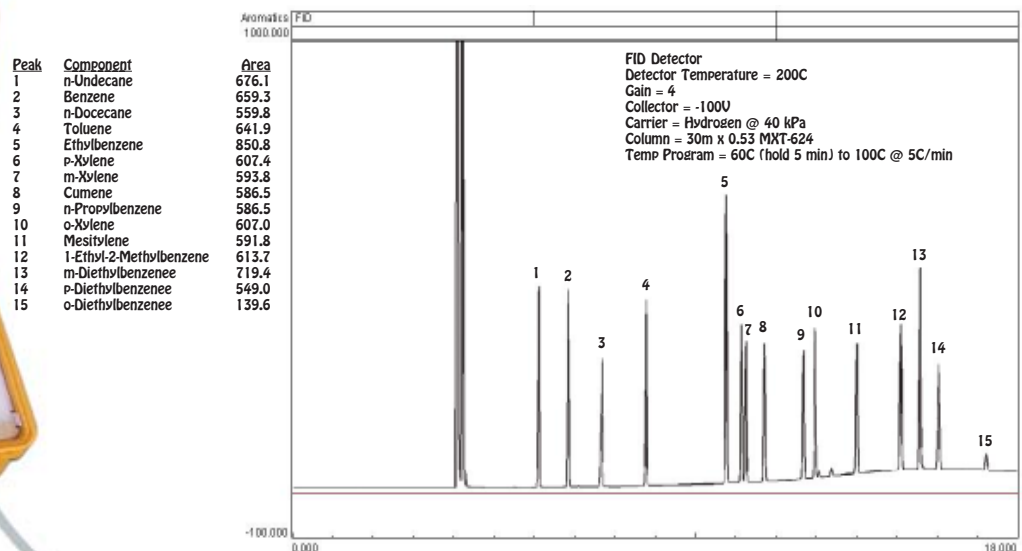


Series 600 GC



Companion 1 Portable GC

Aromatics



11/2015
Specifications may change without notice.



Solvents & Chemicals

Amines



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Amines play prominent roles in biochemical systems where they are widely distributed in nature in the form of amino acids, alkaloids, and vitamins. Amines such as epinephrine, thiamin, and Novocaine have pronounced physiological activity. The odor of decaying fish is due to simple amines produced by bacterial action. Amines are used to manufacture many medicinal chemicals, such as sulfa drugs and anesthetics and the important synthetic fiber nylon is also an amine derivative. Because the use amines are critical to so many industries the DPS Amines GC Systems are specifically configured with your application in mind. We use the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC Systems for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Amines GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

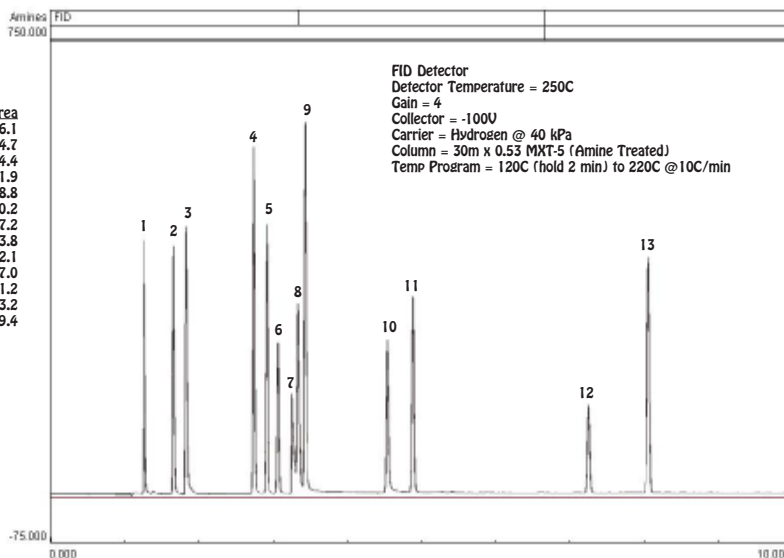
Available Configurations Include:

- 600-C-113 - Series 600 Amines GC Analyzer (FID, 30m)
- 500-C-113 - Companion 1 Portable Amines GC Analyzer (FID, 30m)

Amines & Phenols



Peak	Component	Area
1	Diethylamine	326.1
2	Pyridine	314.7
3	Morpholine	344.4
4	Phenol	391.9
5	Aniline	368.8
6	2-Chlorophenol	240.2
7	Diethylenetriamine	167.2
8	Octylamine	293.8
9	1-Methyl-2-Pyrrolidinone	452.1
10	2-Nitrophenol	267.0
11	2,6-Dimethylaniline	281.2
12	Nicotine	183.2
13	2-Nitroaniline	339.4



Companion 1 Portable GC

11/2015 Specifications may change without notice.



Solvents & Chemicals

Acrylates



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Plastics are a multi-billion dollar industry worldwide. One of the most common forms of plastic are produced from acrylates. Acrylates and methacrylates are common monomers, which easily form polymer plastics because their double bonds are very reactive. These groups of polymers are generally referred to as acrylic plastics and are noted for their transparency and resistance to breakage. Plexiglas is an example of a clear break resistant acrylic polymer. Because the composition and impurities in the plastics are so critical to their strength and performance, the DPS Acrylates GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC Systems for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Acrylates GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

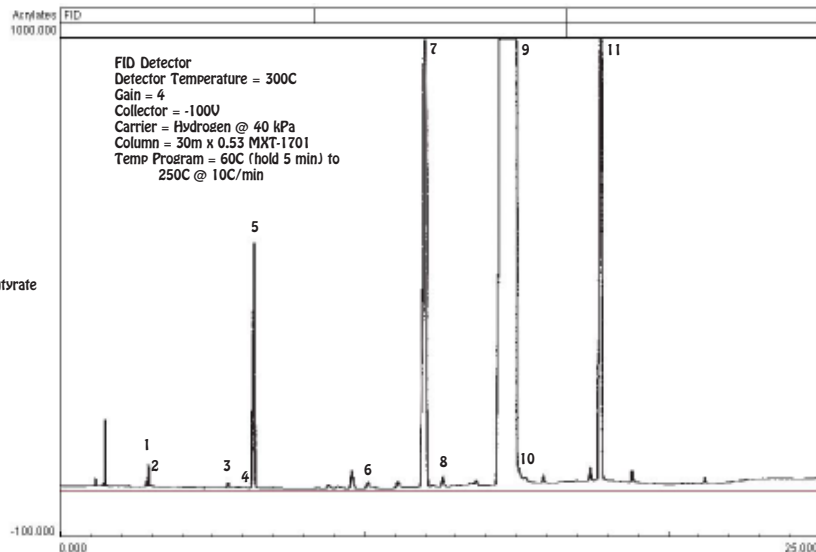
Available Configurations Include:

- 600-C-110 - Series 600 Acrylates GC Analyzer (FID, 30m)
- 500-C-110 - Companion 1 Portable Acrylates GC Analyzer (FID, 30m)

Acrylic Impurities



Companion 1 Portable GC



11/2015 Specifications may change without notice.



Solvents & Chemicals

Cresols



www.dps-instruments.com

The mixture of cresols obtained from coal tar is called cresylic acid. The cresols, which are aromatic methylphenols, are used in the manufacture of disinfectants, household cleaners, deodorizers, certain pesticides, and synthetic resins. They have also been used as antiseptics, although they have largely been displaced by less toxic compounds. Cresols are found in many foods and are also used as a wood preservative. These important chemicals are used in so many industries that the need for analysis has dramatically increased. To meet this need, the DPS Cresol GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Cresol GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

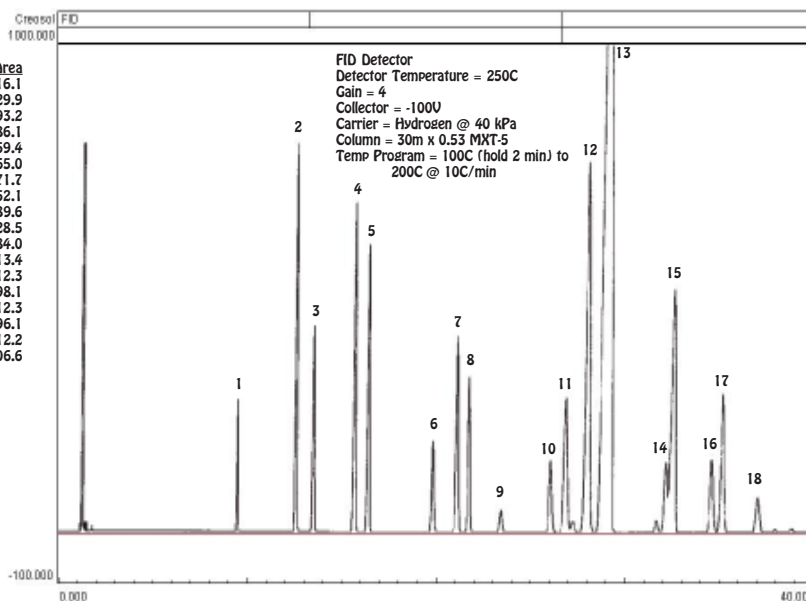
- 600-C-116 - Series 600 Cresol GC Analyzer (FID, 30m)
- 500-C-116 - Companion 1 Portable Cresol GC Analyzer (FID, 30m)

Cresols & Phenols



Companion 1 Portable GC

Peak	Component	Area
1	Phenol	216.1
2	o-Cresol	429.9
3	2,6-Xylenol	293.2
4	p-Cresol	386.1
5	m-Cresol	359.4
6	o-Ethylphenol	165.0
7	2,4-Xylenol	271.7
8	2,5-Xylenol	252.1
9	2,4,6-Trimethylphenol	89.6
10	2,3-Xylenol	128.5
11	p-Ethylphenol	184.0
12	m-Ethylphenol	413.4
13	3,5-Xylenol	1612.3
14	C3 Phenol	98.1
15	3,4-Xylenol	312.3
16	C3 Phenol	96.1
17	4-Ethyl-2-Methylphenol	212.2
18	5-Ethyl-2-Methylphenol	106.6



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Solvents & Chemicals

Solvents



www.dps-instruments.com

Organic solvents are a broad class of compounds that include aromatics, alcohols, esters, ethers, ketones, amines, and other liquid hydrocarbons. Their chief uses are as media for chemical syntheses, as industrial cleaners, in extractive processes, in pharmaceuticals, in inks, and in paints, varnishes, and lacquers. There are so many different kinds and so many uses for solvents that we have configured the DPS Solvents GC Systems to be as versatile a possible to handle all of your solvents analysis requirements. We have included the latest designed high resolution capillary column and the sensitive FID detector to quickly detect all of these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Solvents GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

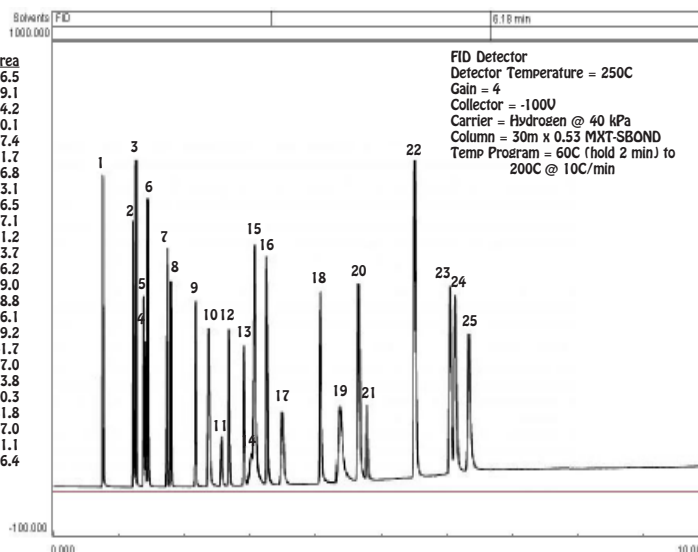
- 600-C-121 - Series 600 Solvents GC Analyzer (FID, 30m)
- 500-C-121 - Companion 1 Portable Solvents GC Analyzer (FID, 30m)

Industrial Solvents



Companion 1 Portable GC

Peak	Component	Area
1	Methanol	436.5
2	Ethanol	379.1
3	Acetonitrile	454.2
4	Dichloromethane	250.1
5	1,1-Dichloroethane	267.4
6	Acetone	401.7
7	trans-1,2-Dichloroethylene	356.8
8	Nitromethane	323.1
9	cis-1,2-Dichloroethylene	316.5
10	Tetrahydrofuran	297.1
11	Chloroform	71.2
12	Ethyl Acetate	303.7
13	1,2-Dichloroethane	66.2
14	1,1,1-Trichloroethane	369.0
15	Benzene	348.8
16	Trichloroethylene	316.1
17	1,4-Dioxane	119.2
18	Pyridine	341.7
19	Methylcyclohexane	157.0
20	Toluene	363.8
21	Dimethylformamide	120.3
22	Chlorobenzene	481.8
23	Ethylbenzene	337.0
24	m & p-Xylene	331.1
25	o-Xylene	306.4



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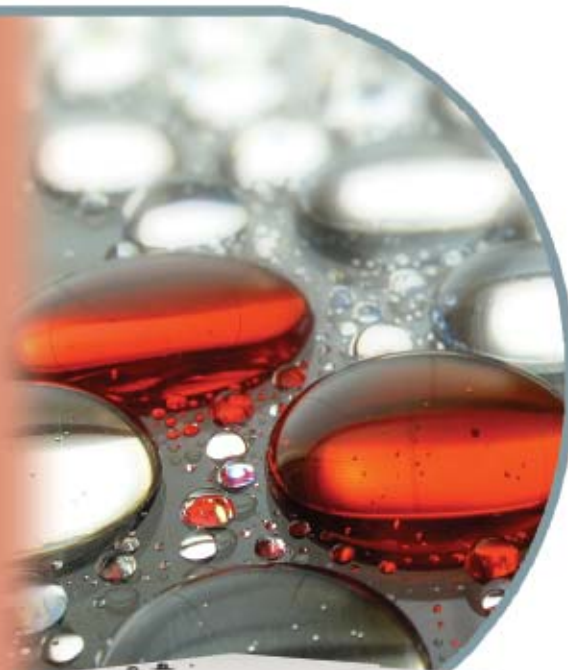
Solvents & Chemicals

Silanes



www.dps-instruments.com

Silanes are structural analogs of saturated hydrocarbons, but are much less stable. All burn or explode when exposed to air and react readily with olefins to form alkylsilanes, which are products used as water repellents, masonry protection, starting materials for silicones, and in the manufacture of semiconductors. Silanes are also used as coupling agents to adhere glass fibers to a polymer matrix, or a synthetic layer on a titanium implant. With so many uses for silanes, and keeping safety in mind, the DPS Silanes GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Silanes GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

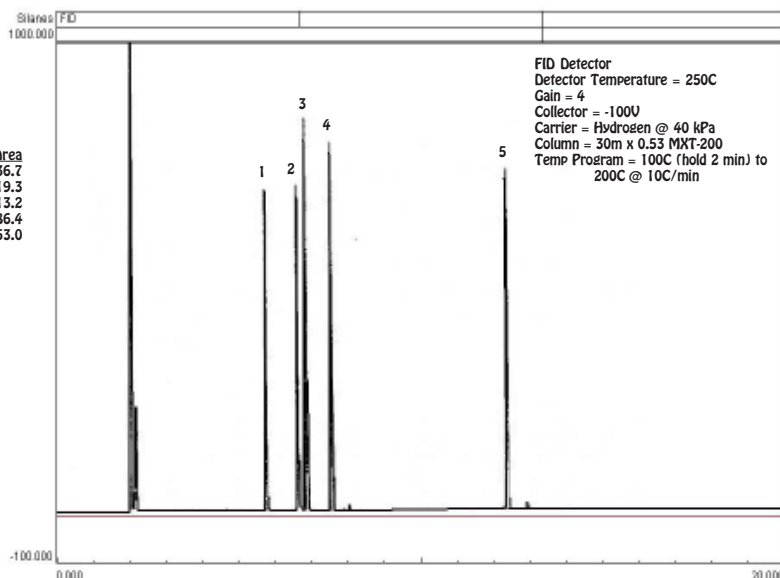
- 600-C-119 - Series 600 Silanes GC Analyzer (FID, 30m)
- 500-C-119 - Companion 1 Portable Silanes GC Analyzer (FID, 30m)



Companion 1 Portable GC

Silanes

Peak	Component	Area
1	Phenyldichlorosilane	936.7
2	Phenyltrichlorosilane	919.3
3	Methylphenyl Dichlorosilane	1013.2
4	Phenylvinyl Dichlorosilane	986.4
5	Diphenyl Dichlorosilane	953.0



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Solvents & Chemicals

Siloxanes



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The word Siloxane is derived from the words Silicon, Oxygen, and Alkane. Siloxanes can be found in products such as cosmetics, deodorants, water repelling windshield coatings, and some soaps. They occur in landfill gas and are being evaluated as alternatives to perchloroethylene for dry cleaning, which is widely considered environmentally undesirable. The polymerized form of siloxanes (polysiloxanes) are similar to silicones and also used as adhesives and moisture barriers. To make sure that all of these compounds can be separated and identified, the DPS Siloxanes GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Siloxanes GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

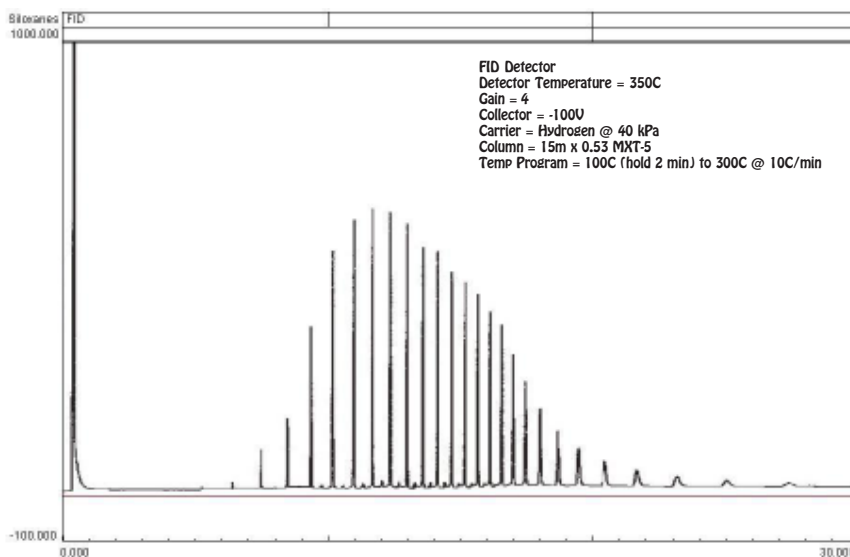
Available Configurations Include:

- 600-C-120 - Series 600 Siloxanes GC Analyzer (FID, 15m)
- 500-C-120 - Companion 1 Portable Siloxanes GC Analyzer (FID, 15m)



Companion 1 Portable GC

Polysiloxane



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Solvents & Chemicals

Solvents



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Organic solvents are a broad class of compounds that include aromatics, alcohols, esters, ethers, ketones, amines, and other liquid hydrocarbons. Their chief uses are as media for chemical syntheses, as industrial cleaners, in extractive processes, in pharmaceuticals, in inks, and in paints, varnishes, and lacquers. There are so many different kinds and so many uses for solvents that we have configured the DPS Solvents GC Systems to be as versatile a possible to handle all of your solvents analysis requirements. We have included the latest designed high resolution capillary column and the sensitive FID detector to quickly detect all of these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Solvents GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

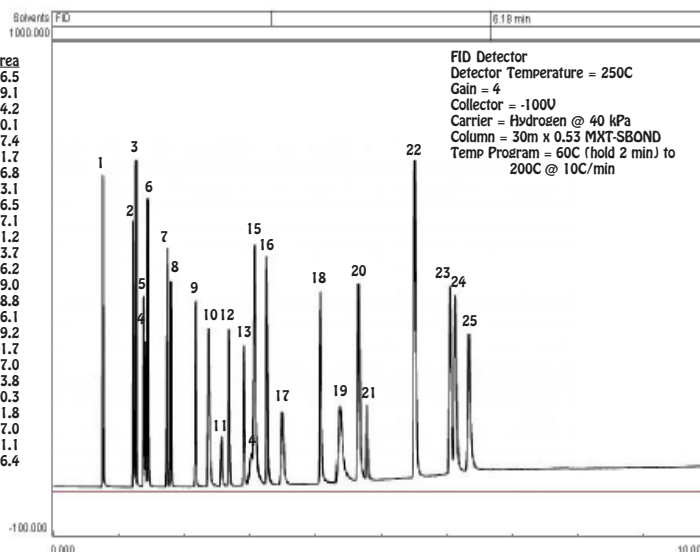
- 600-C-121 - Series 600 Solvents GC Analyzer (FID, 30m)
- 500-C-121 - Companion 1 Portable Solvents GC Analyzer (FID, 30m)

Industrial Solvents



Companion 1 Portable GC

Peak	Component	Area
1	Methanol	436.5
2	Ethanol	379.1
3	Acetonitrile	454.2
4	Dichloromethane	250.1
5	1,1-Dichloroethane	267.4
6	Acetone	401.7
7	trans-1,2-Dichloroethylene	356.8
8	Nitromethane	323.1
9	cis-1,2-Dichloroethylene	316.5
10	Tetrahydrofuran	297.1
11	Chloroform	71.2
12	Ethyl Acetate	303.7
13	1,2-Dichloroethane	66.2
14	1,1,1-Trichloroethane	369.0
15	Benzene	348.8
16	Trichloroethylene	316.1
17	1,4-Dioxane	119.2
18	Pyridine	341.7
19	Methylcyclohexane	157.0
20	Toluene	363.8
21	Dimethylformamide	120.3
22	Chlorobenzene	481.8
23	Ethylbenzene	337.0
24	m & p-Xylene	331.1
25	o-Xylene	306.4



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Solvents & Chemicals

Styrene



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Styrene is a colorless oily liquid which is produced annually by the millions of pounds. The majority of the styrene used is converted into polystyrene, which is a rigid clear thermoplastic polymer that can be molded into objects or made into foam, which is used as a packing material and thermal insulator. Other thermoplastic or even thermosetting resins are prepared from styrene by copolymerization with suitable comonomers. A smaller quantity of styrene goes into the manufacture of synthetic rubbers. Because the composition and impurities in polystyrene are so critical to its performance, the DPS Styrene GC Systems are configured with the latest designed high resolution capillary column and the sensitive FID detector to quickly detect these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC System for analyses right where the samples are taken. The fast heating and rapid cooling column oven in every DPS GC vastly increases your sample throughput. The fully integrated Styrene GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

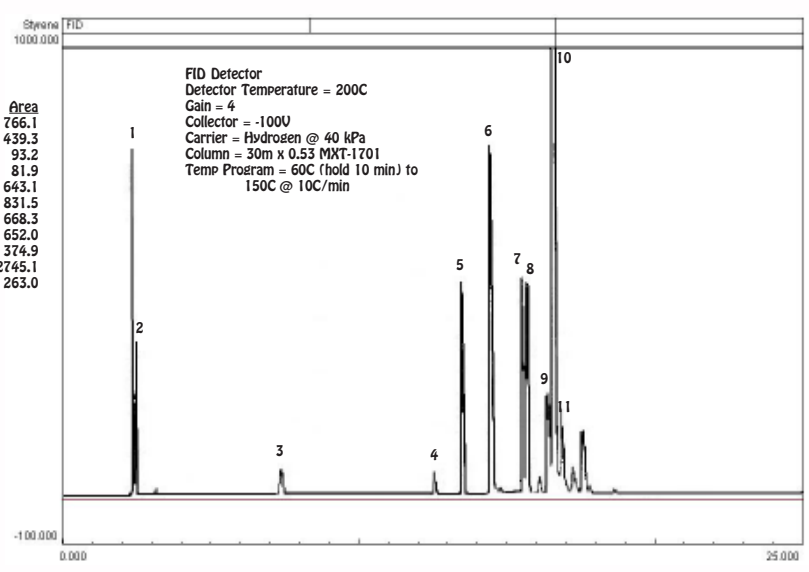
- 600-C-122 - Series 600 Styrene GC Analyzer (FID, 30m)
- 600-C-122 - Companion 1 Portable Styrene GC Analyzer (FID, 30m)

Styrene Impurities



Companion 1 Portable GC

Peak	Component	Area
1	1,3-Butadiene	766.1
2	Butene	439.3
3	Acrylonitrile	93.2
4	Diethylhydroxylamine	81.9
5	Toluene	643.1
6	Vinylcyclohexene	831.5
7	Ethylbenzene	668.3
8	m-Xylene	652.0
9	o-Xylene	374.9
10	Styrene	2745.1
11	Cumene	263.0



11/2015 Specifications may change without notice.



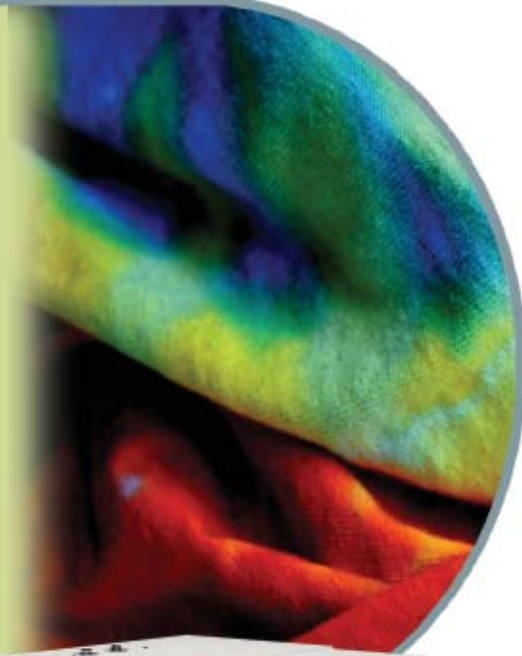
Solvents & Chemicals

Aldehydes



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Aldehydes are used for the manufacture of synthetic resins, dyestuffs, flavorings, perfumes, and other chemicals. Low molecular weight aldehydes, such as formaldehyde and acetaldehyde have sharp, unpleasant odors. Whereas, higher molecular weight aldehydes, such as benzaldehyde and furfural have pleasant, often flowery, odors and are found in the essential oils of certain plants. Aldehydes are also used as preservatives and disinfectants. Because of the wide range of components and mixtures the DPS Aldehydes GC Systems are configured specifically with you in mind. We have included the latest designed high resolution capillary column and the sensitive FID detector to quickly detect all of these compounds. The Series 600 GC is for analyses in the lab, or use the Portable Companion 1 GC Systems for analyses right where the samples are taken. The fully integrated Aldehydes GC Analyzer Systems are small and lightweight and all DPS systems are modular for expandability, upgrades, and easy service.



Series 600 GC

Available Configurations Include:

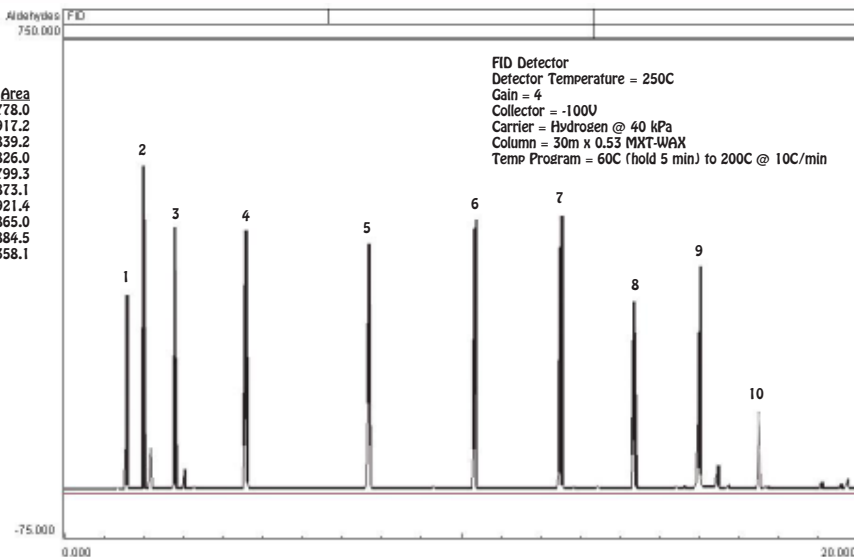
- 600-C-112 - Series 600 Aldehydes GC Analyzer (FID, 30m)
- 500-C-112 - Companion 1 Portable Aldehydes GC Analyzer (FID, 30m)

Aldehydes



Companion 1 Portable GC

Peak	Component	Area
1	Ethanal	778.0
2	Propanal	917.2
3	Butanal	839.2
4	Pentanal	826.0
5	Hexanal	799.3
6	Heptanal	873.1
7	Octanal	921.4
8	Nonanal	865.0
9	Decanal	884.5
10	Undecanal	358.1



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