



 **SERALGAZ**  
Sanayi Gazları Ticaret A.Ş



## About Us

Seralgaz was established in 1996 in İkitelli Industrial Zone and has been selling industrial and medical gas since its establishment.

Our company, which started to sell pure and high quality ammonia gas in 1998, providing pure ammonia and quality service that was missing in the sector until that day. We offer it to our customers with our facilities and vehicle fleet with a daily stock capacity of 50 tons.

In addition, our company, which started to produce 25% concentrated aqueous ammonia, also meets the aqueous ammonia needs of the leading companies in our country with its facilities with a capacity of 500 tons.

Our company has continued to invest in vehicles and cylinders by closely following the market development. It has reached the capacity to serve all domestic and foreign regions with our vehicle fleet consisting of trailers and liquid gas tankers without being dependent on our region.

Our company, which aims to meet all kinds of gas needs of our industrial producers with its honest, principled and quality service since its establishment, provides all kinds of technical support and equipment support for industrial gases. Although it has completed its transportation investments, it continues its investments in order to increase the quality of the service we offer to our valued customers all over our country.

# Green Energy and Sustainable Production with Seralgaz

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As Seralgaz, we use green energy in production with sustainable energy studies in order to protect nature and future generations. We prefer renewable energy sources, taking into account the environmental impact of wastes in all of our activities and in our production process.

We contribute to this process in which global companies are involved with the understanding of green industry, and we minimize our carbon footprint thanks to our sustainability strategy. We proudly hold the title of Turkey's first green-energy industrial and medical gas filling facility, which we won in 2017 with the solar panels we have built for our production facilities.

# Industrial Gases

In our sales of industrial gases, which constitute a large part of our sales; We provide services to sectors such as iron-steel and non-ferrous metal manufacturing, powder metallurgy, heat treatment, production, laser cutting, welded manufacturing.

In addition, we provide special gas mixtures in accordance with the production methods in line with the demands of our customers.

In industrial gases, we serve as cylinders, cylinder bundles, liquid containers according to the demand and consumption of our customers.



<b>Argon</b> Industrial Gases	<b>Acetylene</b> Industrial Gases	<b>Nitrogen</b> Industrial Gases
<b>Hydrogen</b> Industrial Gases	<b>Helium</b> Industrial Gases	<b>Ethylen</b> Industrial Gases
<b>Carbondioxide</b> Industrial Gases	<b>Dry Air</b> Industrial Gases	<b>Oxygen</b> Industrial Gases

## Weld Mix

<b>205</b>	<b>220</b>	<b>Argohid Gas</b>
<b>210</b>	<b>Arco Gas</b>	<b>Aro Gas</b>
<b>212</b>	<b>Ark Gas</b>	

# Medical Gases

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With the medical gas filling, sales and storage authorization certificate within our company, we continue to serve hospitals, clinics and health institutions at full speed. The sales of Medical gases has done with cylinder and cylinder bundle systems. Our medical gases are filled in accordance with the standards by passing through special and constantly renewed filters.



# High Purity Gases

Seralgaz fills high quality and high purity gases and process gases for metallurgy, electronics, environment, petrochemical, food, biotechnology and pharmaceutical industries and many similar industries. Our gases, which we call as high purity and mix gases, are supplied in steel or aluminum cylinder of different capacities and with brass or stainless valves.

Analyzes of special gases are performed with GC devices calibrated with internationally traceable gases.

**High purity gases filled and sold are listed at below.**

<b>High Purity Argon</b>	<b>High Purity Oxygen</b>	<b>High Purity Carbondioxide</b>
<b>High Purity Nitrogen</b>	<b>High Purity Acethylene</b>	<b>High Purity Ammonia</b>
<b>High Purity Helium</b>	<b>High Purity Dry Air</b>	<b>SO2</b>
<b>High Purity Hydrogen</b>	<b>High Purity Methane</b>	<b>High Purity Propane</b>



# Food Gases

Food (MAP) gases are obtained for almost all foodstuffs and from mixtures of Nitrogen, Carbon Dioxide and Oxygen in varying proportions depending on the type of food. These mixtures not only protect the food from negative effects, but also make the external appearance of the food more vivid, increase the yield by extending the shelf life of the food.

Food gases vary according to the products requested, ambient temperatures and similar conditions. Our food gas mixing ratios and usage product table are as follows.

MAP GASES	PRESSURE	QUANTITY
Gıda Gazı A (%100 N2)	200 BAR	9,4 m3
Gıda Gazı 35 (%35 CO2 + Balans N2)	200 BAR	13,04 M3
Gıda Gazı 4 (%30 CO2 + Balans N2)	200 BAR	11,44 M3
Gıda Gazı 5 (%40 CO2 + Balans N2)	200 BAR	12,34 M3
Gıda Gazı 6 (%50 CO2 + Balans N2)	200 BAR	13,4 M3
Gıda Gazı 12 (%20 CO2 + Balans O2)	200 BAR	11,9 M3
Gıda Gazı 13 (%25 CO2 + Balans O2)	200 BAR	12,27 M3
Gıda Gazı 14 (%30 CO2 + Balans O2)	200 BAR	12,67 M3



Gıda Ürünü	CO2%	N2%	O2%
White Meat	25-30	70-75	
Cheese	25-30	70-75	
Cooked Meat	25-35	65-75	
Crawn, Mussel	30-40	30-40	30
Pizza	40-50	40-60	
Bread	50-60	40-50	
Bakery Products	50-60	50-60	
Coffee		100	
Nuts, Potato Chips		100	
Red Meat	20-35		65-80
Vegetables, Fruits	3-5	90-94	3-5





# G Gases

G gases are referred to as heater test gases, stoves, burners, heaters and combi boilers tested using flammable gas are tested with these gases before they are shipped. We continue to supply G gases with our EMRA sales authorization certificate.

<b>G20 (CH<sub>4</sub>-Methane 99.5%)</b>	<b>200 bar</b>	<b>12 m<sup>3</sup></b>
<b>G21 (13% C<sub>3</sub>H<sub>8</sub> balance CH<sub>4</sub>)</b>	<b>59 bar</b>	<b>3.2 m<sup>3</sup></b>
<b>G23 (7.5% N<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>8.9 m<sup>3</sup></b>
<b>G25 (14% N<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>8.8 m<sup>3</sup></b>
<b>G25.1 (14% CO<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>9.2 m<sup>3</sup></b>
<b>G26 (7% C<sub>3</sub>H<sub>8</sub> + 13% N<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>110 bar</b>	<b>6.2 m<sup>3</sup></b>
<b>G26.1 (6% C<sub>3</sub>H<sub>8</sub> + 14% CO<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>124 bar</b>	<b>7.3 m<sup>3</sup></b>
<b>G27 (18% N<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>8.7 m<sup>3</sup></b>
<b>G27.1 (18% CO<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>9.3 m<sup>3</sup></b>
<b>G30 (50% I-C<sub>4</sub>H<sub>10</sub>+50% N-C<sub>4</sub>H<sub>10</sub>)</b>	<b>-</b>	<b>25 kg</b>
<b>G31 (C<sub>3</sub>H<sub>8</sub>-Propane 99.5%)</b>	<b>-</b>	<b>21 kg</b>
<b>G32 (C<sub>3</sub>H<sub>6</sub>-Propylene 99%)</b>	<b>-</b>	<b>21.5 kg</b>
<b>G110 (24% N<sub>2</sub> + 26% CH<sub>4</sub> balance H<sub>2</sub>)</b>	<b>150 bar</b>	<b>7.4 m<sup>3</sup></b>
<b>G112 (24% N<sub>2</sub> + 17% CH<sub>4</sub> balance H<sub>2</sub>)</b>	<b>150 bar</b>	<b>7.2 m<sup>3</sup></b>
<b>G222 (23% H<sub>2</sub> balance CH<sub>4</sub>)</b>	<b>150 bar</b>	<b>8.5 m<sup>3</sup></b>

# Ammonia Gas

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Ammonia gas is a compound formed as a result of combining hydrogen and nitrogen gas in a pressurized environment. Ammonia has an important place in many production sectors. The sectors where it is used are nitration, brazing, annealing, cold storage, solar panel production, electric chip production. As Seralgaz, we have been selling ammonia with our cylinder and tanker fleet since 1998. Seralgaz aims to support valuable industrial companies of our country with innovative approaches, besides working with cylinders, it also supports companies with high consumption with special capacity ammonia tanks and portable ammonia tanks.

We supply high purity ammonia gases with the aim of contributing to companies that manufacture with sensitive production methods.

In addition to the ammonia gases we sell, we also sell ammonia cylinders and tanks.



# Aqueous Ammonia

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Aqueous ammonia, also known as ammonium hydroxide solution, is a chemical formed by the dissolution of pure ammonia in water at a maximum rate of 25%. In our facilities, aqueous ammonia is produced together with pure water formed as a result of water subjected to reverse osmosis processes and 0 waste. A few properties of aqueous ammonia are as follows.

- Its density is 0.0909 at 15 degrees. It has a concentration of 25.65%.
- It is expressed with the formula  $\text{NH}_4\text{OH}$ .
- It has a clear appearance.
- It turns into liquid form under certain pressures at normal temperatures. The type of ammonia obtained from this process is called aqueous ammonia.
- It shows weak base feature.
- The aqueous solution of ammonia is called aqueous ammonia.
- The weight of the aqueous solution is 25% at 20 degrees.
- Density is 0.903 gr/cm<sup>3</sup> at 20 degrees.

These products are shipped in drums, IBCs or tankers according to the demands of the companies. The usage areas of aqueous ammonia are as follows.

- Pharmaceutical and fertilizer production,
- In the synthesis of perfumes,
- In oil refineries, neutralizing acid-containing by-products,
- In the production of synthetic fiber,
- Cotton and yarn cleaning,
- It is used in the production of synthetic resin.



# Ethylene Oxide

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Ethylene oxide is a colorless, odorless, toxic gas, slightly heavier than air, flammable and explosive, soluble in water, alcohol and other organic solvents.

Since ethylene oxide is a very flammable chemical, it is usually filled with carbon dioxide in a cylinder and sold as an ethylene oxide-carbon dioxide mixture in industrial uses.

Ethylene oxide usage areas are as follows.

It is used for sterilization to stop microbiological activity and in the production of ethylene glycol.



# R290

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R290 coded propane gas used for cooling is used in refrigerators and cooling cabinets and should not be mixed with LPG or propane gas used in industry. Compared to propane, its moisture content is lower and its purity is higher.

There are two separate valves in our R290 cylinders to ensure both liquid and gas use. As Seralgaz, we deliver R290 gas to companies with high consumption in 45 KG cylinders.



# Laser Gases

Carbon dioxide, nitrogen and helium gases are needed to create the laser beam in laser cutting machines, which are called carbon laser machines used today.

Laser gases can be used in two different ways in carbon laser machines.

By connecting High Purity Carbon Dioxide, High Purity Helium and High Purity Nitrogen gases separately in machine with 3 separate entrances,

After filling the specified 3 gas mixtures into a cylinder, connecting from a single inlet which It is given to the machine.

Laser gas mixtures are as follows.

	CO2%	N2%	He%	GAS VOLUME IN 150 BAR
Lazer 12	5,4	27	Balans	7 M3
Lazer 1	3,4	15,6	Balans	7,04 M3
Lazer 2	4,5	13,5	Balans	7,07 M3
Lazer 3	9	13,5	Balans	7,3 M3
Lazer 4	5	Balans	40	7,32 M3
Lazer 5	1,7	23,4	Balans	6,99 M3
Lazer 6	4	26	Balans	7,11 M3
Lazer 7	5	35	Balans	7,21 M3
Lazer 8	12	12	Balans	7,46 M3
Lazer 9	3,4	31,4	Balans	7,11 M3



# Steel Draw and Aluminum Cylinders

Seralgaz, one of the pioneers in its sector, is one of the leading companies in the sales of domestic and imported steel drawing and aluminum cylinders produced in accordance with European standards used for industrial and medical purposes in Turkey and abroad.

Our company sells 34CrMo4 alloy 5 L, 10 L, 40 L, 50 L valved capped cylinders for each gas and 6061 alloy 1L, 2 L, 5 L, 10 L and 50 L valved capped aluminum cylinders.

Product Name	Work/ Test Pressure	Cylinder Volume	Height	Diameter	Weight
5 L Seamless Cylinder	150/225 BAR	5 L	470 mm	140 mm	8 KG
5 L Seamless Cylinder	200/225 BAR	5 L	470 mm	140 mm	8 KG
10 L Seamless cylinder	150/225 BAR	10 L	840 mm	140 mm	13.5 KG
20 L Seamless cylinder	200/300 BAR	20 L	920 mm	220 mm	30 KG
40 L Seamless cylinder	150/200 BAR	40 L	1200 mm	230 mm	50 KG
40 L Seamless cylinder	200/300 BAR	40 L	1200 mm	230 mm	50 KG
50 L Seamless cylinder	200/300 BAR	50 L	1500 mm	230 mm	56 KG
50 L Seamless cylinder	230/345 BAR	50 L	1500 mm	230 mm	56 KG



# MTP

Seralgaz, one of the pioneers in its sector, has specially designed 12, 9 and 16 MTP systems for companies with high consumption. Our products have been used by our customers for years without any problems.

We manufacture our cylinder bundle models in 9x 50 Lt, 12x 50 Lt volume options according to EN ISO 10961, 2010/35/EU TPED and ADR.

Our cylinder bundle products are used safely in the industrial and medical sectors.

Product Name	Work/ Test Pressure	Cylinder Volume	Height	Width	Depth	Weight
Cylinder Bundles 9 Package	230/345	450 Lt	2000 mm	800 mm	800 mm	930 KG
Cylinder Bundle 12 Package	230/345	600 Lt	2000 mm	800 mm	1050 mm	1050 KG





# Gas Equipment

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As Seralgaz, in addition to gas and cylinder sales, we sell industrial and medical gas equipment, we have central gas systems sales, installation and gas systems testing. We provide technical engineering support together with the gas equipment in our product range.

In our product range;

Flame Arresters, Alarm Systems, Gaskets, Check Valve Groups, Industrial Equipment, Economizers, Heating Groups, Hoses, Flex Hoses, Welding and Annealing equipment, Cryogenic Equipment, Laboratory Post Groups, Power Plant Regulators, Torques, General Purpose Regulators, Sigorta , Valve And Groups.

With our 25 years of experience and knowledgeable staff, we make central gas systems and installations for special projects.



# Cylinder Testing

Our company was authorized by the Ministry of Science and Technology in 09.10.2012. Since this date, all the cylinders have been tested, maintained and painted by us, and the safety of life and property of our customers, which is our priority, has always been protected.

The cylinders, which come to our company for test purposes, are carefully tested, maintained and painted and delivered with their reports.

Testing and maintenance procedures vary according to the type of gas and place of use. If we want to use a general expression, these transactions are carried out in an average period of ten years.

Our company carries out the test and maintenance operations of the Pi-marked tubes, which started in 2005 as a result of the mutual negotiations with TÜV-SÜD on 02.06.2014 and the necessary examinations in our company's Esenyurt facilities, under the document and supervision given by TÜV-SÜD. And it organizes the test reports.



