



cantaş  
kîmya

CANTAŞ CHEMICAL  
PRODUCT CATALOG



# ABOUT US

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Cantaş Chemical Industry and Trade Inc. (in original Cantaş Kimya Sanayi ve Ticaret A.Ş.) has been established within the deep-rooted and innovative infrastructure of the ENSO holding group of companies.

Today Cantas is serving the automotive, air conditioning and refrigeration sectors by supplying refrigerants which it has started in the 1990s and expanded its product range considerably after the second facility was installed in the early 2000s. Now Cantas continues to serve most of the automotive, air conditioning and refrigeration customers in Turkey and abroad in its modern facility with full automation infrastructure, high production and stocking capacity, which was established in Gebkim Specialized Industrial Site in 2019.

With its advanced laboratory infrastructure, the acceptance of the products, their regular controls and all processes of the manufactured products are followed.

Adopting “Sustainable Quality and Continuous Development” as a principle, Cantaş Kimya Sanayi ve Ticaret A.Ş. is growing with its valuable customers in the sector.

# REFRIGERANTS

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Cantaş Kimya is one of the biggest companies in Europe and Turkey in its sector with its modern production facility, product quality, service success and project experience.

In our wide product range, we offer multiple solution options for various uses and different system structures, together with HFC gases, as well as our low Global Warming Potential HFO and HC gases.

Refrigerants are gases used in heating systems such as heating, air conditioning and ventilation, circulating in a closed circuit.



## Mobile Air Conditioning

With the supply of new generation refrigerants used in air conditioning systems of passenger cars, light commercial trucks and heavy duty vehicles, companies that have an important place in the automotive sector are supported. R1234YF, one of the new generation gases, is environmentally friendly with its low Global Warming Potential.



## Commercial Industrial Refrigeration

It is possible to select HFC, HFO and HC refrigerants with different parameter ranges for various industrial applications and systems. Thanks to our wide product range and high quality products, we offer you the opportunity to use your systems with high efficiency. We provide a complete range of products used in these applications.



## Transport Refrigeration

They are the coolers that are widely used with low Global Warming Potential and preferred for the transportation of commercial products in low and medium temperature ranges in the refrigerated transportation we offer to our customers. We meet all the needs in this field with HFC and HFO mixed gases.



## Chillers

Depending on the system features, different refrigerants can be preferred considering the technical features. We offer all solutions in this sector with a wide product range.

Chiller cooling systems, consisting of compressor, condenser, expansion valve and evaporator, are systems that work by cooling the compressed and heated gas in the compressor in the condenser.



## Stationary A/C and Heat Pumps

By supplying both classical and new generation refrigerants to our customers, we aim to achieve high performance in the air conditioning systems of residential and commercial buildings.

### PACKAGING



Gas Cylinder



Tank



Barrel



Iso Tank

# R134a

Automotive service technicians depend on R-134a refrigerant, a non-ozone depleting hydrofluorocarbon (HFC) replacement for R-12. R-134a is the standard in many mobile air conditioning (AC) units, and also replaces R-12 in: Commercial stationary refrigeration systems, Chiller systems and home appliances, Existing refrigeration and AC systems. Because many original equipment manufacturers (OEMs) specify polyolester (POE) oil for use, systems that retrofit with R134a.

Also Solstice® R1234yf, Opteon™ YF R1234yf, XL-10 R-1234yf, XL-10 R-1234yf, N-13 R450A, XP-10 R-513A, Solstice R1234ze, Solstice R1233zd available.



ASHRAE Number	R134a
Molecular Weight	102.03
Boiling Point at 1 atm, (°C)	-26.3
Vapor Pressure 25°C, (bar)	6.657
Liquid Density at 25°C, (kg/m3)	1206
Flammability (solid, gas)	None
Critical Temperature, °C	101.1
Ozone Depletion Potential	0
Global Warming Potential	1430*

### APPLICATION



### PACKAGING



Scan for product details

Modern facility with modern equipment

# R404A

R-404A is a blended hydrofluorocarbon (HFC) refrigerant comprised of R-125, R-134a, and R-143a. It was designed to replace R-502 and R-22 used in commercial refrigerator equipment for low and medium temperature ranges. Its properties make it ideal for use in display cases, refrigerated vehicles, ice makers, and other applications. R404A is a nonflammable, low toxicity refrigerant that carries an ASHRAE A1 safety classification and offers similar properties to the refrigerant it replaces.

Also Opteon™ XL20 (R-454C), XL-40 R454A, L-40X R455A, XP-40 R-449A, XP-44 R-452A, N-40 R-448A, R407F are available.

\*Made in Turkey

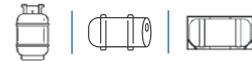


ASHRAE Number	R404A
Molecular Weight	97.61
Boiling Point at 1 atm, (°C)	-46.45
Vapor Pressure 25°C, (bar)	12.42
Liquid Density at 25°C, (kg/m3)	1048
Critical Temperature, °C	72.07
Ozone Depletion Potential	0
Flammability (solid, gas) (%vol)	None
Global Warming Potential	3922*

#### APPLICATION



#### PACKAGING



Scan for product details



# R407C

R-407C is a high-performance blend. This alternative to R-22 in positive displacement air conditioning (AC) equipment can also:

Replace R-502 in new and retrofitted medium-temperature applications with evaporator temperatures above -6.7 °C (20 °F) Work in existing medium-temperature applications.

Work in new or existing residential and commercial AC and heat pumps. It is popular to have an ability to be topped off after a leak, multiple times, with minimal impact on system performance.

Also R407A is available.

\*Made in Turkey

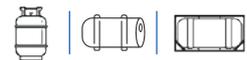


ASHRAE Number	R407C
Molecular Weight	86.2
Boiling Point at 1 atm, (°C)	-43.5
Vapor Pressure 25°C, (bar)	11.74
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1134
Critical Temperature, °C	86.74
Ozone Depletion Potential	0
Flammability (solid, gas) (%vol)	None
Global Warming Potential	1774*

## APPLICATION



## PACKAGING



## FLAMMABLE RANGE

A1 A2L A2 A3

## GLOBAL WARMING POTENTIAL

1 1774 10.000



Scan for product details

The only supplier of  
Turkey's automobile and A/C industry

R-410A refrigerant offers higher cooling capacity and significantly higher pressure than R-22 for use in systems specifically designed for R-410A.

This hydrofluorocarbon (HFC) refrigerant is compatible with polyolefin (POE) oils and replaces R-22 in positive displacement air conditioning (AC) and heat pump systems for residential and light commercial use.

Also Opteon™ XP41 (R-463A): New and retrofit systems, Opteon™ XL41 (R-454B), Opteon™ XL55 (R-452B), Opteon™ XL41 (R-454B), Opteon™ XL55 (R-452B), Opteon™ XP20 (R-449C): New and retrofit systems are available.

\*Made in Turkey

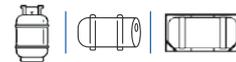


ASHRAE Number	R410A
Molecular Weight	72.6
Vapor Pressure 25°C, (bar)	16.5
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1062
Critical Temperature, °C	72.13
Ozone Depletion Potential	0
Boiling Point 1 atm (°C)	-51.58
Flammability (solid, gas) (%vol)	None
Global Warming Potential	2088*

#### APPLICATION



#### PACKAGING



Scan for product details

#### FLAMMABLE RANGE

A1 A2L A2 A3

#### GLOBAL WARMING POTENTIAL

1 2088 10.000

# R417A

R-417A refrigerant is a hydrofluorocarbon (HFC) retrofit alternative for R-22 in direct expansion (DX) stationary air conditioning (AC) and medium-temperature commercial refrigeration systems. Because R-417A is compatible with mineral (MO), alkylbenzene (AB), and polyolester (POE) oils—most retrofits do not require a lubricant change. Therefore, retrofitting DX stationary AC and medium-temperature commercial refrigeration systems from R-22 takes considerably less time and investment.

### Applications

for R-417A include residential and commercial AC systems and medium-temperature refrigeration units, like food service, storage and processing, and supermarket cases. For water chillers, however, R-417A refrigerant is recommended.

Also R438A, R422A, R422D are available.

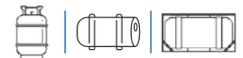


ASHRAE Number	R417A
Molecular Weight	106.7
Boiling Point at 1 atm, (°C)	-39.01
Vapor Pressure 25°C, (bar)	9.85
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1150
Critical Temperature, °C	87.4
Ozone Depletion Potential	0
Flammability	None
Global Warming Potential	2346*

#### APPLICATION



#### PACKAGING



Scan for product details

# R600a

Refrigerant R600a is a natural refrigerant, an isomeric form of unbranched butane, which is suitable for many cooling applications.

It is environmentally friendly and effective and, in refrigeration applications, it boasts low power consumption and load power. It is also compatible with many lubricants.

It is suited to a variety of industrial, commercial and domestic applications.

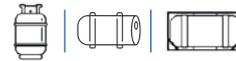


ASHRAE Number	R600a
Molecular Weight	58.1
Boiling Point at 1 atm, (°C)	-11.7
Vapor Pressure 25°C, (bar)	3.1
Density at 20°C, (g/cm <sup>3</sup> )	0.557
Critical Temperature, °C	134.69
Ozone Depletion Potential	0
Flammability	A3
Global Warming Potential	3*
LFL	1,5% by vol (38 g/cm <sup>3</sup> )

#### APPLICATION



#### PACKAGING



Scan for product details



Huge storage capacity

R32 is a HFC refrigerant, used as a replacement for R410A in low temperature refrigeration and air conditioning applications. This refrigerant is a preferred replacement for R410A in new equipment. R32 is not to be used as a retrofit.

Also Solstice N41 R-466A is available.

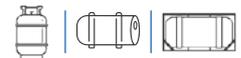
ASHRAE Number	R32
Molecular Weight	52.02
Boiling Point at 1 atm, (°C)	-51.7
Vapor Pressure 25°C, (bar)	16.897
Liquid Density at 25°C, (kg/m3)	0.9588
Flammability (solid, gas)	A2L
Critical Temperature, °C	78.35
Ozone Depletion Potential	0
Global Warming Potential	675*
LFL	14% ASTM 681-85



**APPLICATION**



**PACKAGING**



Scan for product details

Production with flexible automation infrastructure

# WIDE RANGE OF **PRODUCTS**

REFRIGERANTS



*Atex directive infrastructure  
suitable for flammable products*

# FIRE EXTINGUISHING AGENTS

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Fire extinguishing systems containing our HFO, HC and HFC gases; which are the most sensitive for environment, clean, demanded, used and known fire extinguishing products.

Fire extinguishers containing these agents are widely used in server rooms, electrical panels and appliances, libraries and archives. We offer all the solutions used in these areas to our customers.

## APPLICATION



Fire  
Extinguisher

## PACKAGING



Gas Tank



Iso Tank



Barrel



# FK-5-1-12

Fire extinguishing clean agent Halon and HFC clean agent replacement FK 5112 Fire Protection Fluid is a next-generation halon and HFC clean agent replacement technology, designed to alleviate concerns for human safety, performance and the environment.

FK 5112 fire protection fluid vaporizes quickly (50 times faster than water) when released, is non-corrosive and not electrically conductive, so that sensitive electronic systems such as data centers, server rooms, telecommunications or other equipment are not damaged. In contrast to foam or powder, it does not leave any annoying residues, so the systems do not have to be cleaned and remain ready for use.



ASHRAE Number	FK5112
Molecular Weight (g/mol)	316.04
Boiling Point at 1 atm, (°C)	49.2
Freezing Point (°C)	-108
Vapour Pressure at 25°C, (bar)	0.404
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1339
Critical Temperature, °C	168.66
Ozone Depletion Potential	0
Global Warming Potential	1
Flammability (solid, gas)	None

### APPLICATION



### PACKAGING



Scan for product details



R125 is used to protect critical facilities against fires, as HFCs offer unique properties. They are low in toxicity, nonflammable, non-corrosive, and compatible with other materials. In addition, they have thermodynamic and physical properties that make them ideal for a variety of uses. One high value use of these compounds is as fire extinguishants and explosion suppressants. They are used in hand-held portable extinguishers, total flooding systems, and local application systems.



It is a safe, clean, and electrically nonconductive agent and is suited for use at low temperatures because it has a low boiling point ( $-48.1\text{ }^{\circ}\text{C}$  [ $-54.7\text{ }^{\circ}\text{F}$ ]) that is similar to Halon 1301 ( $-57.7\text{ }^{\circ}\text{C}$  [ $-72\text{ }^{\circ}\text{F}$ ]).

ASHRAE Number	R125
Molecular Weight (g/mol)	120.02
Boiling Point ( $^{\circ}\text{C}$ )	-48.5
Vapour Pressure at $25^{\circ}\text{C}$ , (bar)	13.71
Liquid Density at $20^{\circ}\text{C}$ , (g/cm <sup>3</sup> )	1.23
Flammability (solid, gas)	None
Critical Temperature, $^{\circ}\text{C}$	66.3
Ozone Deplation Potential	0
Global Warming Potential	3500*

#### APPLICATION



#### PACKAGING



Scan for product details

#### FLAMMABLE RANGE

A1 A2L A2 A3

#### GLOBAL WARMING POTENTIAL

1 3500 10.000

R227ea fire suppressant is widely accepted and respected around the world, with a history of protecting the world's most crucial and irreplaceable assets. It's used in thousands of applications—including cultural property, data centers, and critical infrastructure—across more than 70 countries.



R227ea systems offer exceptionally fast fire protection, reaching extinguishing levels in ten seconds or less. They stop ordinary combustible, electrical, and flammable liquid fires before they cause significant damage, and are safe for use around people.

ASHRAE Number	R227EA
Molecular Weight (g/mol)	170.03
Boiling Point at 1 atm, (°C)	17.3
Vapour Pressure at 25°C, (bar)	3.895
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1.394
Critical Temperature, °C	139.25
Ozone Depletion Potential	0
Flammability (solid, gas)	None
Global Warming Potential	3220*

#### APPLICATION



#### PACKAGING



Scan for product details

R236fa is intended to replace Halon 1211 in portable fire extinguishers and local application flooding applications. It is a safe, clean, and electrically nonconductive agent.

It is suited for use in all streaming applications, because it has a boiling point (-1.4 °C [29.4 °F]) that is similar to Halon 1211 (-3.4 °C [26 °F]).

It also has utility as a total flooding and explosion suppression agent.



ASHRAE Number	R236fa
Molecular Weight (g/mol)	152.04
Boiling Point at 1.013 bar(°C)	-1.44
Vapour pressure at 25°C, (bar)	2.72
Liquid Density at 25°C, (kg/m3)	1360
Flammability in air	None
Critical Temperature, °C	124.92
Global Warming Potential	9810*

#### APPLICATION



#### PACKAGING



#### FLAMMABLE RANGE

A1 A2L A2 A3

#### GLOBAL WARMING POTENTIAL

1 9810 10.000



Scan for product details

# BLOWING AGENTS

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With our high stock capability and wide range of products, we offer door-to-door service with ISO tanks in blowing agents.

When necessary, we provide support to manufacturers by providing technical support with our expert technical staff.

APPLICATION



Blowing  
Agents

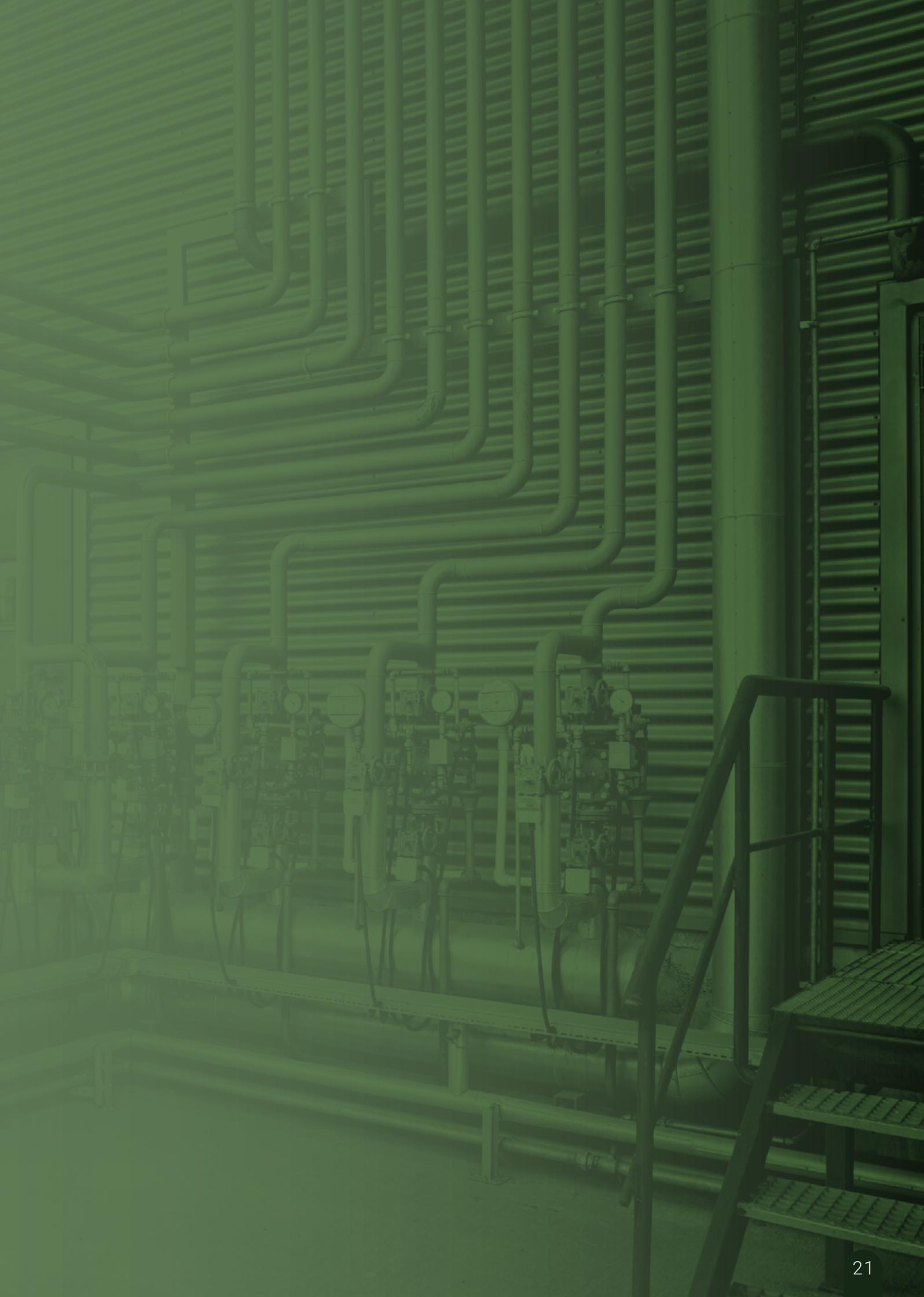
PACKAGING



Gas Tank



Iso Tank



# R152a

The product R 152a is a colourless HFC gas. It is not considered an ozone-depleting substance. It is used as a blowing agent.

It can be used to manufacture foams, polyurethane and polystyrene foams that are principally used as insulation materials for building construction works, to insulate cold rooms in the field of refrigeration and to produce food containers.

Applications: Foodstuffs, Refrigeration and Foams production of extruded and expanded plastic materials (insulation panels, insulation, food containers)



ASHRAE Number	R152a
Molecular Weight (g/mol)	66.05
Boiling Point at 1 atm, (°C)	-24.7
Vapour Pressure at 25°C, (bar)	5.08
Liquid Density at 25°C, (kg/m <sup>3</sup> )	899
Critical Temperature, °C	113.15
Ozone Deplation Potential	0
Flammability	A2
Global Warming Potential	124*
LFL	3,9%

#### APPLICATION



#### PACKAGING



Scan for product details

#### FLAMMABLE RANGE

A1 A2L A2 A3

#### GLOBAL WARMING POTENTIAL

1 124 10.000

R245fa blowing agent is a proven replacement for HCFC-141b and other hydrofluorocarbon and nonfluorocarbon blowing agents in rigid polyurethane foam. R245fa is:

- Non-ozone-depleting
- Nonflammable (ASTM E-681, EU A11)
- Listed under the U.S. EPA's Significant New Alternatives Policy (SNAP) program to replace ozone-depleting substances.
- Listed on the TSCA inventory/registered under REACH
- VOC-exempt (per U.S. EPA).



ASHRAE Number	R245fa
Molecular Weight (g/mol)	134.05
Boiling Point at 1.013 bar(°C)	15.13
Vapour Pressure at 25°C (bar)	1.48
Liquid Density at 25°C, (kg/m <sup>3</sup> )	1339
Flammability in air	None
Critical Temperature, °C	154.01
Ozone Depletion Potential	0
Flammability in air	None
Global Warming Potential	1030*

#### APPLICATION



#### PACKAGING



Scan for product details

#### FLAMMABLE RANGE

A1 A2L A2 A3

#### GLOBAL WARMING POTENTIAL

1 1030 10.000



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