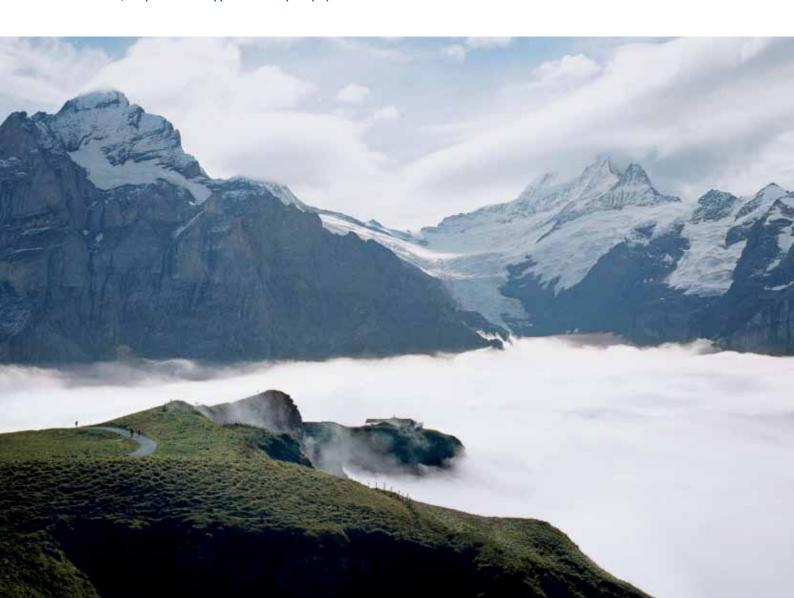


Peace of mind. Refrigerant quality you can rely on.

Over the past few years, there has been a dramatic rise in the volume of counterfeit and poor-quality refrigerants being sold globally. These products present a number of quality and safety challenges. They often contain high levels of impurities, failing to conform to DIN 8960, AHRI 700 or other quality standards. In addition, they are often supplied in low-quality cylinders that

fail to meet local legislative requirements (e.g. CE marking). In some cases, the cylinder contents do not even correspond to the refrigerant ordered and supposedly delivered. This is compounded by the fact that these counterfeit products are rarely supplied with safety datasheets.



The counterfeit challenge. Knowing the true cost to your business.

Compromised functionality

These safety, financial and environmental risks that these products pose can have a big impact on the quality and reliability of your refrigeration or air-conditioning system.

In particular, you may wish to consider the following:

Safety risks to service personnel and operators

- Risk of explosion if counterfeit product unexpectedly contains flammable gases
- → Risk of exposure to toxic gases
- → Safety implications caused by cylinder failures

Interruptions to business operations and financial implications

- → Refrigeration system inefficiencies (poor cooling capacity resulting in high power consumption)
- → Equipment downtime caused by compatibility issues (damaged hoses and seals) and thermodynamic differences (e.g. compressor failure as a result of flooding)

Environmental damage

- Illegal gases (e.g. CFCs or HCFCs) often have a much higher global-warming and ozone-depletion potential
- → Incorrect gases can cause system failures and unnecessary gas leakages

Knowing exactly what's in your cylinder. With quality-assured products and services.

Playing it safe

There are many ways to avoid the counterfeit trap. First and foremost, by sourcing your refrigerants from well-known distributors or official agents. It is also a good idea to audit your suppliers to check whether they know where their refrigerant gases were produced and whether they have the correct quality-assurance processes in place across the supply chain. An authentic supplier should also provide you with technical support in the safe handling and use of refrigerants. Last but not least, it makes sense to keep a realistic eye on pricing – if the price appears too good to be true... it probably is!

Trusted partner

The Gases Division of The Linde Group is one of the largest and the most global distributors of refrigerants. For more than 40 years, we have been a trusted partner of refrigeration and air-conditioning companies. We operate throughout Europe, Africa, Asia-Pacific and the Americas. Inspired by our strict product stewardship policy, we constantly strive to improve the quality and safety of our products and services. A responsible approach to health, safety and environmental management ensures that our staff, agents and customers are able to use our products safely and in compliance with national legislation.

There are a number of reasons it makes sense to partner with Linde:

Sourcing

- → We source refrigerants, cylinders and valves directly from the manufacturers, auditing our supply base to ensure we only work with high-quality producers.
- → We ensure that our products are regularly analysed.

Operations and logistics

→ We operate product quality management systems such as ISO 9001 to ensure the quality of our operations – storage, filling, cylinder testing and maintenance processes included.

Technical support

- → We offer extensive technical and operational support.
- ightarrow We also advise on the gas best suited to your needs.
- → Our experts can even help you comply with local legislation and regulations.
- → You can rely on us for training tailored to your needs.

For further information on refrigerants available in your area, contact your local Linde supplier or visit www.linde-gas.com/refrigerants.