

### Carbon monoxide.

Quality assured solutions and services.



## A global industry essential. Solutions and services tailored to customer needs.

#### Introduction

Carbon monoxide (CO) is used by many industries around the world. Key applications include its use as a precursor for chemical production and in metallurgy to purify metals. It is also common in the regeneration of catalysts, the production of solar silicon, electronic components and heating gas.

At Linde Gas we can meet all your different needs around the delivery, handling and safe management of CO. Through our local network we can help you to optimise production processes, satisfy regulatory compliance and deliver on the environmental agenda.

With our global sourcing and production facilities we have substantial bulk storage and breaking capabilities. This is supported by our transfilling, packaging, quality assurance and international logistics, all of which enable us to deploy best-in-class operational practice and service to you.

#### Product stewardship

We operate strict policies regarding product stewardship. Our closed loop management systems ensure that all the safety, health and environmental protection issues relating to our CO solutions and services are fully understood and reduce risk to people, property and the environment.

#### Linde portfolio

Carbon monoxide is one product in the Linde Gas portfolio. We provide compressed, bulk, specialty and medical gases as well as packaged chemicals and refrigerants – backed by the provision of state of the art application technology, process know how, services and equipment.

As part of The Linde Group, Linde Engineering is also a leading global solutions partner for plant engineering and construction worldwide. Its expertise spans facilities for the production of hydrogen and synthesis gas, oxygen and olefins as well as natural gas treatment. Both divisions work closely together to constantly develop new products and technologies that deliver maximum value for customers.



Carbon monoxide used in production of solar grade silicon.

# Global solutions: local service delivery. A trusted partner.

Linde Gas is one of the world's most advanced providers of added value CO solutions and services. We offer:

#### Extensive product offer

- a choice of qualities: industrial, technical, refrigerant and high quality/ specialty grades (HiQ<sup>®</sup>)
- typical specification of carbon monoxide 2.0 industrial grade is: CO > 99.0%,  $N_2 < 4000$  ppm,  $H_2 < 1500$  ppm
- volumes to suit scale and application
- a choice of packaging that enables customers to reduce their inventory, better match use and handling requirements and minimise changeover; options include:



2–50 litre steel/aluminium cylinders



Cylinder bundles



Large capacity trailers

#### Total solution and services

- best in class logistics ensuring security of supply to the point of use
- technical and operational expertise
- regulatory compliance
- specialist services such as process review, on-site audits, risk assessments and advice on end user production chain, dosage and timing
- turnkey supply systems
- · local service delivery through Linde.

To order or for further information please visit www.linde-gas.com/chemicals

### Getting ahead through innovation.

With its innovative concepts, Linde is playing a pioneering role in the global market. As a technology leader, it is our task to constantly raise the bar. Traditionally driven by entrepreneurship, we are working steadily on new high-quality products and innovative processes.

Linde offers more. We create added value, clearly discernible competitive advantages and greater profitability.

Each concept is tailored specifically to meet our customers' requirements – offering standardised as well as customised solutions. This applies to all industries and all companies regardless of their size.

If you want to keep pace with tomorrow's competition, you need a partner by your side for whom top quality, process optimisation and enhanced productivity are part of daily business. However, we define partnership not merely as being there for you but being with you. After all, joint activities form the core of commercial success.

Linde - ideas become solutions.