

### Sulfur dioxide.

Quality assured solutions and services.



# Optimising production processes. From wine making to glass manufacture.

#### Introduction

Sulfur dioxide (SO<sub>2</sub>) is vital to many industries around the world. It has multiple applications – as a chemical for synthesis, optimising the production efficiency of manufacturing plants, as a food preservative to the packaging industry and as an antioxidant in wine making. It is also common to the glass industry, water treatment, mining and metallurgy.

At Linde Gas we can meet all your needs around the delivery, handling and safe management of  $SO_2$ . 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 bulk storage and breaking capabilities we can ensure your needs are met, supported further by our transfilling, packaging, quality assurance and international logistics, all of which enable us to deploy best in class operational practice.

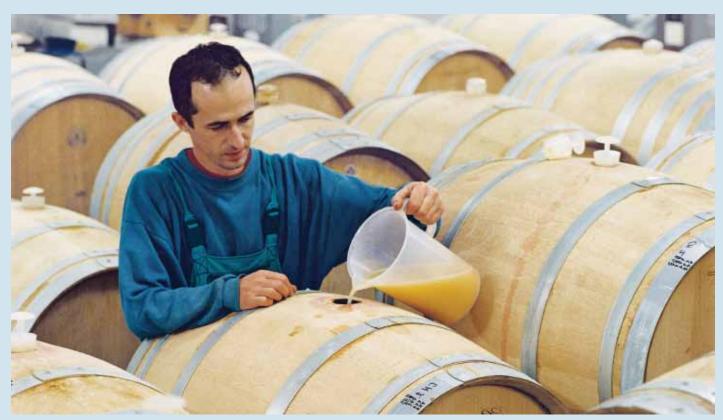
#### Product stewardship

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  $SO_2$  solutions and services are fully understood and reduce risk to people, property and the environment.

#### Linde portfolio

Sulfur dioxide is one product in the Linde Gas portfolio. We provide compressed, bulk, specialty and medical gases as well as packaged chemicals and refrigerants – all 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. This 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.



Sulfur dioxide used in winery

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

Linde Gas is one of the world's most advanced providers of added value  $SO_2$  solutions and services. We offer:

#### Extensive product offer

- a choice of qualities from industrial and food grade gas (E220) to high quality/specialty grade (HiQ<sup>®</sup>)
- typical specification of HiQ $^{\odot}$  sulfur dioxide 3.8 grade is:  $SO_2 > 99.98\%$ ,  $H_2O < 50$  ppm,  $H_2SO_4 < 10$  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:



2-80 litre cylinders



ISO containers



drum tanks up to 900 litres

#### Total solution and services

- $\boldsymbol{\cdot}$  best in class logistics ensuring security of supply to the point of use
- technical and operational expertise
- specialist services such as process review, on site audits, risk assessments and advice on end user production chain, dosage and timing
- turnkey supply systems
- · legislative compliance
- · safe and legal waste management
- · 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.