

# The Linde Group Position on Product Safety and Stewardship.

LeadIng.



## Introduction

### What is product safety and stewardship

Product safety and stewardship refers to the responsible and ethical management of products and their packaging at all stages of the life cycle with the goal of minimising potentially harmful impacts for people and the environment.

At Linde we take a holistic view of product safety and stewardship. We engage our stakeholders to share responsibility for minimising the impacts of our products throughout their entire life cycle, from production, storage and delivery to their use and end-of-life disposal.

### Product safety and stewardship programmes

Product safety programmes apply to all of The Linde Group's products and externally purchased components.

Product stewardship programmes are in effect for gases that have a higher health, safety and environmental (HSE) impact than common gases, e.g. because they contain substances classified as dangerous due to their toxic, corrosive, carcinogenic, mutagenic or reprotoxic properties, or because they are harmful to the environment.

These products are identified in line with relevant applicable standards.

Responsibilities for the implementation of product safety and stewardship programmes are outlined in company standards.

### Linde Group products

By volume, approximately 95 percent of the substances that are placed on the market globally by The Linde Group are classified as non-toxic according to the Globally Harmonised System of classification and labelling of chemicals (GHS) released by the United Nations. These substances are common industrial and medical gases such as oxygen, nitrogen, argon, helium, carbon dioxide and hydrogen.

## Benefits

### Benefits to our customers

Our product safety and stewardship programmes benefit our customers by:

- Providing products and processes that are safer for people to use and, whenever possible, reduce environmental impact;
- Supplying product information, training and support to help fulfil and manage obligations for the safe storage, use and disposal of products; and
- Introducing new products or processes that meet all applicable Linde standards prior to their market launch.

### Benefits to local communities

Our product safety and stewardship programmes benefit local communities by:

- Reducing the risk of harm to both people and the environment; and
- Encouraging our suppliers and our customers to improve their level of HSE performance.

### Benefits to The Linde Group

Our product safety and stewardship programmes benefit The Linde Group by:

- Ensuring legal compliance;
- Creating sustainable business operations by continuously improving our health, safety and environmental performance; and
- Establishing the company as a valued, competent and sustainably acting supplier.

## Policy commitments

### Comply with applicable legal, regulatory, industry and corporate requirements

#### Compliance with regulatory requirements

Many laws are in place to protect people, the environment and property against the potential hazards of a product. For all steps in the life cycle of our products, we have installed processes and measures to ensure compliance with international and local legal and regulatory requirements, internationally applicable standards and our own internal standards.

#### Compliance with hazard classification of chemicals

The Linde Group complies globally with all national regulations concerning the hazard classification of chemicals. As an example, in the European Union The Linde Group complies with regulations concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the Classification, Labelling and Packaging of substances and mixtures (CLP), which implements the Globally Harmonised System of classification and labelling of chemicals (GHS) released by the United Nations in the European Union.

### Collaborate with stakeholders

#### Collaboration

Our product safety and stewardship programmes extend beyond the company.

To achieve this, we work closely with

- Our suppliers to ensure they understand the HSE issues relating to the products that are supplied;
- Our customers to ensure they understand the HSE issues relating to the use of our products or applications;
- Our business partners such as distributors and sales partners to ensure they understand the HSE issues associated with the handling of our products; and
- Regulatory bodies and industrial gas associations to promote HSE best practices.

## Responsible Care®

#### Responsible Care® initiative

At Linde, we aim to go beyond legislative obligations and minimise risks even further through the responsible manufacture and handling of our products across the entire life cycle. We are committed to the principles of the chemical industry's Responsible Care initiative.

Responsible Care is a unique global initiative adopted by chemical companies to demonstrate their commitment to continuous improvement in HSE performance and to open and transparent communication with stakeholders.

### Manage product life cycle risks

#### Identify hazards – assess the relevant potential risks

We systematically identify the hazards and assess the relevant potential risks of

- Our existing product portfolio;
- New applications or customer scenarios using existing products; and
- New products to be introduced.

To ensure responsible product safety and stewardship, we assess and minimise risks along the value chain of our products – from design and marketing to manufacturing, packaging, storage and distribution, all the way to their use, recycling and disposal.

#### Limit the impact of toxic products

We develop and place products that do not pose an unacceptable risk to humans and to the environment when applied in the appropriate manner and for the intended uses. This ensures the potential impact of toxic products is limited to an acceptable level and is in compliance with legal requirements.

We support our customers' ambitions to lower their product's toxicity and impact by offering feasible alternatives, such as products covered within legal phase-out programmes or customers' individual stewardship programmes.

In our production processes we are committed to reducing any harmful impacts of toxic substances through proper engineering controls and personal protective equipment systems.

### **Refrigerant recovery programmes**

We offer refrigerant recovery and recycling to our customers in certain geographies to support them in minimising their greenhouse gas emissions.

### **Prevent illicit use**

We have put processes in place to ensure that products that may be used for illicit applications are identified and used for legitimate purposes only. Also, we have measures to prevent these products from being acquired illegally from our supply chain. An example of an illicit application of substances is the illegal manufacture of narcotic drugs. Suspicions of illicit use are to be reported to the relevant authorities.

### **Life cycle analysis**

In general, we follow a simplified life cycle analysis (LCA) approach that identifies significant risks to health, safety and the environment at each stage of the product life cycle. The product life cycle includes raw materials, production, storage, distribution, use and disposal or recovery.

Where appropriate we conduct a full LCA to identify the environmental impact of identified key higher-risk products.

## **Product safety and stewardship programmes**

### **Risk assessment**

We have programmes to assess the risk of all the products we put on the market. These risk assessments are prioritised by volume and the hazardous properties of the products, taking into consideration the positive impact these products have on applications.

### **Product safety**

Our product safety programme is driven by the implementation of a specific HSE roadmap that includes the following topics:

- Education and competencies;
- Managing product information; and
- Product risk minimisation.

We have standards to support the roll out of the HSE roadmap out in all companies that are members of The Linde Group.

### **Product stewardship**

Product stewardship programmes adopt the life cycle approach, ensuring that for each stage of the product life cycle potential risks to human health and the environment are minimised.

We encourage all relevant stakeholder groups in the life cycle of our products to share responsibility with us to minimise impacts associated with the production, storage, delivery, use and end-of-life disposal of our products.

We have standards to support implementation for product stewardship assessments so that it is implemented in all companies that are members of The Linde Group and that place products on the market classified as toxic.

## **Provide appropriate product information and training**

### **Support, advice and information**

We provide support, advice and information to help customers understand our products and to comply with high standards for safety, health and environmental performance. We ensure that the advice we give our customers is both accurate and up to date by continuously assessing new information and data.

### **Labels and safety data sheets**

Our products are packaged, marked, labelled and supplied together with the relevant safety data sheet according to applicable regulatory requirements and industry best practices.

### **Training**

We have appropriate programmes to train, instruct and update our own staff, business partners and customers in aspects of the responsible management of our products during their entire life cycle.

### **Advertising**

We have programmes to help ensure the ongoing trust of our customers. Marketing, advertising and sales activities must describe our offerings and services legally, fairly and honestly.