

# Sustainability 2024

Report on the activities of SE Tylose GmbH & Co KG  
in the areas of the economy, ecology and social affairs



# Sustainability

## Report on the activities of SE Tylose GmbH & Co KG in the areas of the economy, ecology and social affairs

### Content

|                                       |    |
|---------------------------------------|----|
| About this report                     | 3  |
| Foreword from the Board               | 4  |
| 1. Portrait of SE Tylose GmbH & Co KG | 6  |
| 2. Sustainability in the company      | 7  |
| 3. Action areas                       | 13 |
| 3.1 Supply chain                      | 13 |
| 3.2 Environmental protection          | 14 |
| 3.3 Employees                         | 16 |
| 3.4 Social commitment                 | 20 |

## About this report

In this report, we as a medium-sized chemical company located at Industrial Park Wiesbaden, want to inform business partners, employees, local residents and other interested parties about our performance in the area of sustainability. In addition to the data published annually by our parent company, Shin-Etsu Chemical Co., Ltd. (Japan), we present our own report on our activities and plans in this area, aiming to promote dialogue with all interested parties.

The report is formatted according to the Chemie<sup>3</sup> guidelines for sustainability reporting for medium-sized companies in the chemical industry (version 2.0). Its content and structure consider the three dimensions of sustainability: economy, ecology, and social issues.

We focus on the key sustainability issues that SE Tylose GmbH & Co. KG addresses in its daily business. The introductory section, "SE Tylose GmbH & Co. KG at a Glance," provides information about our company, our understanding of sustainability, and how we implement the standards we set for ourselves.

This sustainability report covers fiscal years 2023 and 2024 and spans the period from January 1<sup>st</sup> 2023, to December 31<sup>st</sup> 2024. Unless otherwise stated, the figures, facts, and information reported here apply to the entire company based in the industrial park in Wiesbaden. There were no significant changes in the company's size, structure, or ownership during the reporting period.

To improve readability, this report largely avoids gender-specific double references. All references are to be understood as gender-neutral.



## Foreword from the Board

Dear reader,

SE Tylose GmbH & Co. KG has been committed to sustainability for many years. With our products and our ecological and social commitment, we make an active contribution to efficient resource use and environmental protection as well as fulfilling our social responsibility. We strongly support the "Guidelines on Sustainability for the Chemical Industry in Germany," which are summarised in the Chemie<sup>3</sup> initiative.

Our commitment to sustainability is also reflected in the fact that we were the first cellulose manufacturer worldwide to develop and publish an Environmental Product Declaration (EPD), detailing the greenhouse gas emissions and other environmental impacts associated with the manufacture and use of our products.

For many years, our parent company, Shin-Etsu Chemical Co., Ltd., Japan, has been regularly reporting on current and future activities in the area of sustainability. In addition to its activities in the main areas of human rights, labour standards, the environment, and anti-corruption, Shin-Etsu Chemical is working on a Carbon Neutral Strategy 2050. SE Tylose GmbH & Co. KG is subjected to the European Union's mandatory sustainability legislation, we consider it appropriate to continue to publish our own report.

All three dimensions of sustainability – economy, ecology, and social responsibility – are equally important to our activities:

- ▶ In order to continue supplying our customers with Tylose® and Tylopor® products, we invest in innovations that help to increase the efficiency of our production processes and the quality of our products. Our water-soluble cellulose ethers are made from a renewable natural product - cellulose. The cellulose comes from certified sustainable forestry or is a by-product of cotton production.
- ▶ Our cellulose ethers are incorporated in a variety of products, where they play a crucial role as a small but effective component. These products include cementitious systems, plaster, and tile adhesives, which last for decades and thus bind CO<sub>2</sub> over the long term. We are continuously working to improve the ecological balance of our products further.
- ▶ As a good socially responsible neighbour, we support local initiatives such as a school with a funding priority for special mental needs, a food bank for those in need or a children's hospice.
- ▶ We fulfill our responsibility towards our employees by monitoring and adhering to collective agreements, and also, through our training programmes, the promotion of a healthy working environment and employee health.
- ▶ In addition, training future skilled workers is important to us, as is our commitment to offering all trainees a long-term job after they complete their training.
- ▶ We plan social initiatives that contribute to environmental protection and will participate in activities to help keep the local area clean in the future (e.g., Rhine CleanUp).

Despite the challenges posed by the gas crisis, inflation and the recession, we have maintained our commitment to all three areas of sustainability.

We are continuing to work on integrating sustainability into all our diverse activities, and on developing and implementing our sustainability strategy.

Further information regarding our activities from 2023 to 2024 can be found on the following pages. We hope you enjoy reading them.

Yours

**Fumio Arai**  
Managing Director



**Dr. Diethart Reichel**  
Site Director





## 1.

## Portrait of SE Tylose GmbH & Co KG

SE Tylose GmbH & Co. KG (SE Tylose) belongs to the Japanese Shin-Etsu Group. As one of the leading international chemical companies, the Shin-Etsu Group employs around 26,000 people worldwide and generated sales of around 16 billion US dollars in the 2024 financial year.

SE Tylose, Wiesbaden employs around 560 people in research & development, production, sales and administration, including around 30 trainees. SE Tylose develops, produces and sells cellulose ethers from Wiesbaden and is one of the world's leading companies in the production and sale of methyl cellulose (MC) and hydroxyethyl cellulose (HEC). These water-soluble cellulose ethers are produced from a renewable raw material, cellulose (cellulose pulp). The cellulose comes from sustainably managed wood, while a smaller proportion is a by-product of cotton production.

The SE Tylose site is conveniently located on the Wiesbaden industrial park. It is the second largest industrial park in Hesse. More than 70 companies are located here, the vast majority of them from the chemical industry.

### Products and their applications

The production of cellulose ethers at the Wiesbaden site is a long-standing tradition. The Tylose® trademark was registered in 1928, and the first production plant for methyl cellulose was commissioned in 1935 at the former Kalle plant, which is now the predecessor of today's industrial park. SE Tylose offers its customers a wide range of over 200 cellulose ether products.

The areas of application are diverse. In the building materials, Tylose® products ensure that ready-mixed mortars, tile adhesives, plasters and levelling compounds have an easy-to-use consistency. In the coatings industry, they enhance the consistency of emulsion paints, facilitating a more uniform and controlled application, with minimal splashing. Tylose® is also used as an additive in a range of personal care products, including toothpaste, shampoo and hair conditioner. In the ceramics industry, Tylose® is used as a highly effective plasticiser and binder in the manufacture of particle filters and catalyst carriers used to clean exhaust gases.

High-purity cellulose ether, manufactured in accordance with Good Manufacturing Practice (GMP) under the brand name Tylopur®, is used in the pharmaceutical industry, for example in tablet coating or for the time-delayed release of active ingredients. Tylopur® products are manufactured in strict accordance with food safety regulations. They are used in the food industry as thickeners and binders, amongst other things. The ability to form thermal gels is particularly useful in applications such as plant-based meat alternatives and gluten-free baked goods. Our products for the pharmaceutical and food industries are PEFC certified.



## 2. Sustainability in the company

SE Tylose recognises its corporate and social responsibility and undertakes activities in the field of sustainability as an integral part of its business. Our actions are based on the UN Sustainable Development Goals (SDGs), the National Action Plan on Business and Human Rights (NAP), the Environmental, Social and Governance (ESG) policy and the CSR Directive Implementation Act (CSR-RUG).

We are dedicated to proactively analysing the risks and opportunities that sustainability issues can entail for our company. This report contains information on the initiatives and activities that we have already started and implemented in this regard. One of the most significant challenges we are dealing with is the reduction of CO<sub>2</sub> emissions, which are damaging to the climate. We are working to identify opportunities for energy saving within our company and implementing measures to this end.

We are committed to the further strengthen respect for human rights, which are a top priority in our company. We have introduced an internal Code of Conduct for our employees and an external Code of Conduct for our business partners, which, together with our Human Rights Policy, our Corporate Social Responsibility Policy and our commitment to environmental protection, document our commitment to sustainability. We actively communicate our guidelines and our sustainability statements on economy, ecology and social issues to our business partners. We will continue to comply with the relevant international codes of conduct and do our part to strengthen the human rights described therein.

The health and well-being of our employees is a priority for us. We are committed to exemplary occupational safety on a daily basis. This commitment is based on the operation of safe facilities, regular training programmes for employees, individual protective equipment of the highest technical standard and appropriate hygiene concepts. A health programme for employees complements these activities.

We are committed to providing our customers with information on the safe and sustainable use of our products. This also includes training for distributors and customers, as well as the provision of specific documentation and certificates. This approach fosters an understanding and awareness of our products throughout our supply chain.

We work permanently to identify and exploit potential improvements in our production processes. Continuous reduction of energy consumption is our goal and is validated annually through the certification of our energy management system according to ISO 50001.

In addition to improving energy efficiency and the associated reduction in CO<sub>2</sub> emissions, we strive to reduce the use of raw materials and water through effective recycling and waste management practices. We source our pulp, our largest raw material in terms of volume, from suppliers who have committed to sustainable forest management. Since 2021, we have been certified according to PEFC (Programme for the Endorsement of Forest Certification), thus supporting the use of responsibly produced raw materials.

Thanks to a central wastewater treatment plant for the industrial park that is specially adapted to the production wastewater that accumulates, our wastewater is biologically purified and discharged into the Rhine following mechanical and chemical pre-treatment. The advanced purification technologies employed (anaerobic, aerobic and denitrification) meet the high regulatory standards for efficient wastewater treatment and enable the production of biogas, which is used to generate energy within the industrial park and thereby contributes to reducing reliance on fossil fuels.

A good economic result that secures jobs, strengthens our infrastructure and allows for successful investments is one of the cornerstones of our success. We place great importance on fair business practices, which are expressed in long-term supplier, distributor and customer relationships. In order to achieve this, we conduct evaluations of new suppliers and carry out regular on-site audits to check the work performance of existing suppliers.

### Sustainability department

In order to enhance the structure of our sustainability work and promote change within the company, a dedicated Sustainability department was established in January 2024. The department's primary task is to identify ways to achieve greenhouse gas neutrality at SE Tylose, to conceptualise specific measures for greenhouse gases reduction and to develop these together with the production plants. The department also structures the work of the Sustainability Taskforce and the sustainability activities in the area of social affairs and corporate governance. Further details will be provided later in this report.

### Sustainable development goals (SDGs)

SE Tylose is committed to adopting a sustainability strategy that aligns with the United Nations' Sustainable Development Goals in the areas of economy, ecology and social affairs.

UN sustainable development goals (SDGs) require the global power of collaboration to make progress in its path. As a leading global chemical company, SE Tylose considers it very important to be a part of this journey. We monitor our products, processes and activities to identify ways which we can impact SDGs.



SE Tylose supports the 17 Sustainable Development Goals (SDGs) set by the United Nations and its products and activities contribute to achieving the following goals, amongst others:



Sustainable Development **Goal 2** aims to improve nutrition and promote sustainable agriculture for healthier future. Tylose® is used as a binder in seed coating to produce uniform seeds, enabling an increase in planting per cultivated area and thus higher yields.

Additionally, Tylopur® food additive products can be used to produce food that contributes to sustainable nutrition and combating global hunger. It is also used as an essential ingredient in plant-based meat substitutes. Plant-based alternatives containing Tylopur® require approximately 95% less water and land to produce than the same amount of beef from conventional animal husbandry.



Sustainable Development **Goal 3** addresses key health challenges and promotes healthcare for all. Excipients produced with Tylopur® are used in the production of medicines and dietary supplements. Additionally, our excipients improve the patient's comfort as well as compliance and acceptance of medicine by enabling oral disintegration and controlled release. Moreover, vegetarian and vegan patients can also be treated with our additives.



Sustainable Development **Goal 12** focuses on reducing waste and promoting the efficient utilisation of resources through sustainable practices in production and consumption. At SE Tylose, we work closely with our suppliers to source more sustainable raw materials. Our main raw material, cellulose derived from trees, is sourced mainly from suppliers who are PEFC certified. In addition, we prioritise short and local delivery routes when possible. In our core activities, energy and resources efficiency projects are regularly managed and consequently implemented in the production plants. Any waste is processed in accordance with legal requirements and recycling is implemented whenever possible.



Sustainable Development **Goal 13** emphasises the urgent need to take action on climate change and improve resilience to the effects of climate change. Tylose® products are used as additives in building materials and paints to improve their workability and quality. Our cellulose ethers are permanently bound into the building material components after curing and setting. This means that the CO<sub>2</sub> bound in them does not represent an additional emission into the atmosphere.

As mentioned under SDG 2, our Tylopur® products contribute to replacing meat. Livestock farming is one of the main sources of methane (greenhouse gas) emissions, so the availability of meat alternatives with Tylopur® helps to reduce methane emissions into the atmosphere.

Key issues that we are currently working on include resource efficiency, increased productivity, intelligent business processes and health improvement. In this endeavour, we are committed to expanding our range of actions and continuing to drive innovation throughout our business activities. Our company is committed to contributing to the SDGs in all aspects, whether through expanding the scope of existing products or developing new ones.

In addition, we are continuously working to improve environmental protection, occupational health and safety, and process safety in our company in accordance with the global Responsible Care® charter.

### Sustainability Task Force

SE Tylose has brought together a team of experts from different divisions of the company working on both department specific and cross-departmental issues as a "Sustainability Task Force". It agrees on goals and sets up a system of key performance indicators, making the topics to be worked on along with our further development, comprehensible and transparent. The integration of the future sustainability strategy into our overall strategy as well as the support of the sustainable development of the company, is fully endorsed by the senior management.

We map the topics that are essential for our company in connection with sustainability in a so-called key matrix, suggested by Chemie<sup>3</sup>. In doing so, we take into account structural and social developments, as well as internally determined priorities from various departments such as research & development, human resources or environmental management. We analyse the topics selected in this way to improve our sustainability performance based on our own targets and guidelines as well as the expectations of interested parties such as customers, employees, business partners and the local public. We regularly review the weighting of the topics as well as the implementation in our company.

We strive for high quality work in our daily tasks, which reflects in the quality of our products. We are a reliable partner for our customers and suppliers and at the same time a fair and reliable employer. Respect for human rights, equal opportunities, safe working conditions and fair pay are integral to what we do. Examples of this are social benefits and flexible working time models, a health programme for all employees and ensuring equality and educational opportunities. In close cooperation with our partner InfraServ Wiesbaden, we train skilled workers to meet our need for qualified personnel.

Our company contributes to supporting the region, the residential areas in our neighbourhood and the families of our employees. To this end, we have developed a donation guideline with which we support various charitable institutions, such as a neighbouring children's hospice, the food bank run by the Kolping Family, Wiesbaden-Biebrich and the Johann-Hinrich-Wichern-Schule - a school with a focusing on special needs. In addition, SE Tylose is regularly involved in the "Girls' and Boys' Day" for children of employees, the "Jugend forscht" perspective forum in the industrial park and the "Wiesbaden Engagiert!" action week.

### EcoVadis Rating

Sustainability assessment is crucial for a chemical company as it helps to identify and mitigate environmental impacts associated with its operations. By evaluating factors such as resource usage, emissions, waste management, human rights and safety, the company can develop strategies to improve its sustainability performance. This proactive approach provides transparency for SE Tylose in sustainability execution among stakeholders, including customers, investors and the community.

To examine our efforts in this context, since 2013 SE Tylose has been committed to securing a sustainability rating on the Ecovadis platform, the market leader in this field. This allows us to continually monitor, examine and enhance our sustainability performance.

Under the annual EcoVadis rating, we are evaluated on the topics of environment, labour & human rights, ethics and sustainable procurement. Furthermore, each topic is subjected to questions regarding policies, measures, actions, results and reporting. We work in our sustainability task force with a team of experts on each topic. After the EcoVadis's analyst team has evaluated our completed questionnaires, we are granted a scorecard together with a medal. These demonstrate our individual sustainability performance, as well as a comparison within our industry and all the companies rated by EcoVadis. We are proud to have held our position over the years in the top 6% of all the rated companies. This reflects our dedication and continuous ambition towards sustainable and responsible business practices.

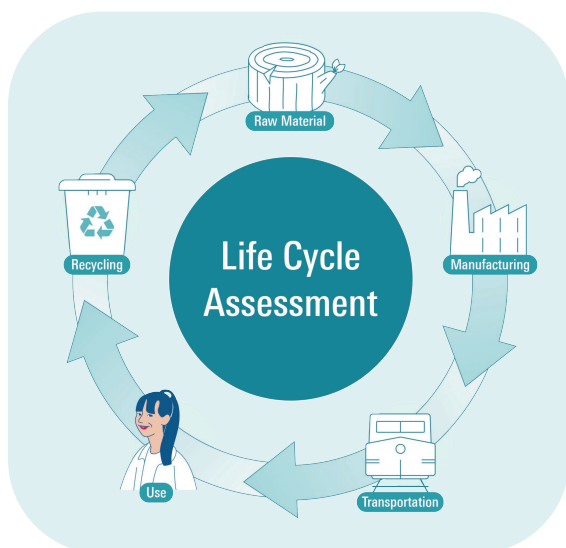


In addition to our overall result, more detailed sub-scores are also presented in our scorecard on the topics of environment, labour & human rights, ethics and sustainable procurement as shown below. In our scorecard a list of strengths and improvement areas are also given. This practice allows SE Tylose to enhance the subsequent rating, understand the changing market demands and society expectations regarding sustainability matters.

Providing a third party sustainability rating enables SE Tylose to meet and monitor the external expectations on sustainability. It also fosters customer loyalty and can reveal new market opportunities. Additionally, transparency in sustainability practices can improve relationships with regulatory bodies and investors, as it demonstrates accountability and commitment to responsible business practices. At the same time, we use the EcoVadis as a standardised method to communicate our sustainability efforts to our business partners.

## Life Cycle Assessment

A key milestone on the way to assessing the sustainability of our products was the creation of a comprehensive life cycle analysis (LCA). In collaboration with an external service provider, it was implemented in 2022 as a standard-compliant life cycle assessment analysis. It is based on the internationally recognised ISO 14040/44 standards and includes the detailed calculation of a Product Environmental Footprint (PEF) as proposed by the European Commission.



The LCA is used to record all the environmental impacts of a product throughout its entire life cycle - from raw material extraction and production through to use and disposal. Various environmental impact categories are analysed, including greenhouse gas emissions (global warming), material emissions such as sulphur dioxide, nitrate or phosphate and the consumption of natural resources. This analysis not only provides reliable data on the current environmental status of our products, but also enables us to identify potential for optimisation.

In order to ensure the high quality and accuracy of our Product Environmental Footprint (PEF), we have approached our suppliers for emission values for our main raw materials such as caustic soda, chloromethane and ethylene oxide/

propylene oxide (EO/PO) and received exact values from them for the Scope 3 CO<sub>2</sub> emissions. By having access to this primary data and integrating it into our analysis, we were able to avoid generic secondary data.

After calculating our PEF, we decided in 2023 to become the first company in the cellulose ether industry to seek independent certification in the form of an Environmental Product Declaration (EPD). At the same time, the updated findings were integrated into our sustainability strategy in order to gain a precise understanding of our ecological footprint and further optimise it.

## Environmental Product Declaration (EPD)

The second milestone in the transparent, standard-compliant assessment of the environmental impact of our products was certification by an independent verification body. Since the beginning of 2024, we have successfully achieved our goal of providing independently certified EPDs for our two main product categories. This provides our business partners with objective and comparable evidence of the environmental impact of our products for the first time, which they can use for their own analyses of subsequent products.

The Environmental Product Declarations were prepared strictly in accordance with the ISO 14025 standard. This ensures that our products are assessed using a uniform, scientifically sound procedure. The basis for this is the specific Product Category Rules (PCR) for 'Base Chemicals', which enable a transparent and precise determination of the environmental indicators. This approach ensures that our EPDs are comprehensible and directly comparable with the results of other market participants.

Close interaction with our customers was a crucial aspect of this process. Many of them benefit directly from our EPDs, as they can integrate the values into their own sustainability assessments and reporting. This objective access to data is becoming increasingly important in the chemical industry in particular.

We have set an industry standard with our certification: our EPDs for HEC and MC were the first of their kind on the market and set a new benchmark. A key benefit of the product focus within the EPD framework, as opposed to company-wide approaches such as the Organisational Environmental Footprint (OEF), is the targeted identification of optimisation potential in raw material procurement and process management.

One specific measure derived from this is the switch to 'green caustic soda'. Since 2024, we have exclusively utilised caustic soda that is produced using sustainably generated electricity. This switch has already contributed to a significant reduction in our CO<sub>2</sub> emissions and underlines our efforts to continuously improve the environmental footprint of our products. Further information on this topic can be found in the Supply Chain chapter.

## 3. Action areas

### 3.1 Supply chain

Although SE Tylose sources raw materials globally, our objective is to maintain supply routes that are both short and sustainable, leveraging mainly European sources wherever feasible and utilising transport routes by ship and rail as opposed to road. We strive for trust and long-term cooperation with our suppliers and partners, and rely on strategic partnerships that ensure secure processes within our supply chain.

As part of our supplier management strategy, we prioritise not only the quality and reliability of deliveries, but also ensure compliance with environmental and social standards. These standards are reviewed as part of continuous, risk-based supplier audits and evaluations.

We are monitoring the developments surrounding the European Union's Supply Chain Act and are intensively analysing the requirements that will result for us. In line with this commitment, we are dedicated to the continuous enhancement of our processes and guidelines. Our approach to sustainability throughout the supply chain is considered a dynamic process.

#### Sustainable purchase of raw materials

The majority of our most important raw material, cellulose, is sourced from sustainable forestry. This is confirmed by corresponding PEFC certification. We are committed to sustainability and are therefore in continuous dialogue with our raw material suppliers regarding the availability of more sustainably produced variants of packaging and raw materials.

Following a comprehensive life cycle assessment, the subsequent detailed analysis indicated that caustic soda has a substantial impact on our ecological footprint. Consequently, we have taken the decision to transition to a more sustainable source of caustic soda. This measure underscores our commitment to reducing Scope 3 greenhouse gas emissions.





### Sustainable purchase of packaging materials

In the area of packaging materials, we have already succeeded in switching a large proportion to more sustainable alternatives with recycled content where this is permitted. Our customers receive big bags that are made from 30% recycled material. All of the outer packaging films we use are made from a minimum of 30% recycled material. These examples demonstrate our commitment to transitioning our packaging portfolio to more sustainable or reusable products.

By participating in the RIGK packaging and REPASACK collection and recycling system, we facilitate effective recycling of packaging materials for our customers. This approach not only helps to avoid waste, but also promotes a sustainable circular economy.

## 3.2 Environmental protection

As a chemical company, we are aware of the environmental impact of our manufacturing processes. At the same time, environmental protection and energy efficiency are two of the core principles that form the foundation of our corporate philosophy and are integral to our corporate policy. We recognise our responsibility to utilise our expertise to reduce our environmental impact, including emissions into air, water and soil. We are committed to ongoing improvement in this area, as demonstrated by obtaining ISO 14001 'Environmental Management' and ISO 50001 'Energy Management' certification. We are responsible for producing annual environmental audit reports for all production facilities. These reports are used to guide and control environmental management. The individual environmental projects are tracked and documented in detail, with the corresponding optimisation or energy saving target clearly defined.



We are continuously working on optimisation measures, from substituting hazardous substances to increasing efficiency, through improved heat recovery systems for the production facilities. Among other things, our current projects aim to increase energy efficiency by saving electricity and reducing specific steam and natural gas consumption. Please find below some examples from the 2024 financial year:

- ▶ Replacement of conventional fluorescent tubes with LED lighting
- ▶ Adaptation of the product specification to reduce the specific energy requirement
- ▶ Utilisation of hot condensate to save steam
- ▶ Use of frequency converters in electrical drive technology
- ▶ Energy-efficient building renovation

The emission values of all our production facilities are measured regularly to ensure they comply with the emission values specified by the authorities; they are often well below these thresholds.

During the years 2023 and 2024, there were no reportable environmental incidents or violations at our company.

### Energy management

Energy saving potentials are systematically identified in accordance to energy management ISO 50001. Energy efficiency programmes for production plants and buildings are being regularly implemented. In addition, waste heat from various plant sections is used in integrated processes. All energy consumption is subject to permanent monitoring. Deviations are recorded and, if necessary, corrective measures are initiated in a timely manner. Within the framework of annual and long-term objectives, we have formulated energy-saving targets, which are implemented within the framework of projects. The energy management system and the energy optimisation of the processes are being successfully and permanently further developed with the involvement of all employees. The consistent optimisation and reduction of energy use is an essential component of the further development of SE Tylose.

### Water and wastewater

The chemical industry requires large quantities of water for its value-added processes. SE Tylose has implemented a series of projects aimed at achieving water savings. The objective is to reduce consumption of drinking water by switching to process water.

The extraction of methane from our organic load in the wastewater produced is an integral part of modern wastewater treatment plant technology. This process enables the recovery of methane as a valuable fuel source, thereby reducing reliance on natural gas. We have also worked towards reducing the organic load in wastewater through technical innovations. This approach has enabled significant cost savings in wastewater treatment and preventing emissions to natural waters.

The majority of the cooling water circuits are operated with modern re-cooling plants, ensuring that only the necessary minimum thermal energy is released into the neighbouring Rhine.

Our actions are guided by the principles of scientific advancement. For many years our research department has been working closely with technical colleges and universities as part of student research projects.

### Waste

We are committed to reducing waste and play an active role in the recycling programmes for the packaging we use. RIGK is the solution for the return and recycling of plastics, while REPASACK is the ideal option for the recycling of paper bags.

We are committed to promoting the reuse of internally used big bags (FIBC) by multiple re-use. We work closely with our suppliers to explore the potential of utilising used packaging material as a raw material for recycling.

The production of cellulose ether is characterised by limited amount of waste output. Any surplus methanol is utilised in the incineration plants to produce steam contributing to reducing natural gas consumption. Typical waste materials include small quantities of oils, metals and paper. These are accordingly recycled.

As part of our commitment to effective waste management, we undertake regular analyses of our waste balances. The company's approach to reducing waste is both practical and well-recognised. Disposal processing via our waste disposal service provider promotes the separate collection of recyclable waste.



This approach ensures that as much of the waste as possible can be recycled, contributing to a more sustainable waste management solution.

### Plant safety

For SE Tylose GmbH & Co KG, plant safety is a fundamental part of our corporate responsibility and our commitment to protecting people and the environment. As a chemical company, we recognise the central importance of safe handling of chemical processes and materials. Our aim is to protect our employees, neighbouring residents and the environment while ensuring the reliability of our plants and their efficient operation in the long term.

We take a variety of measures to ensure that our production facilities are operated reliably, responsibly and safely. These include regular maintenance, comprehensive training, modern monitoring systems and continuous improvement processes.

Here are a few examples:

- ▶ Regularly recurring tests on all pressurised equipment
- ▶ Material-technical investigations to optimise the resistance of apparatus to substances and mixtures
- ▶ Continuous evaluation of the vibration behaviour of rotating equipment in order to detect damage to bearings or drive units at an early stage

In the event of a malfunction or an undesired event at the production facilities, extensive safety precautions are in place to minimise the impact on the protected assets. An overall alarm and hazard prevention plan is in place for the Industrial Park Wiesbaden. We also have implemented internal plans at plant level where all necessary activities and measures that must be taken in the event of an incident are described. The necessity of the plans is communicated in training courses and briefings and tested in regular exercises. The plans are always kept up to date.

## 3.3 Employees

We take responsibility for our employees and customers as well as for our neighbours around our production site in the industrial park Wiesbaden. Together with our works councils and the spokesperson committee, we work continuously to further optimise our working conditions and position ourselves as an attractive and safe employer.

Our corporate guidelines emphasise the importance and recognition of human rights. We support the core labour standards of the International Labour Organisation (ILO) and the guidelines of the Organisation for Economic Co-operation and Development (OECD) for multinational companies; these include recommendations for responsible social and environmental conduct.

We pay all employees at least a living wage. We ensure this through our membership of the Employers' Association of Hesse, which commits us to paying all unionised employees the collectively agreed wages that are well above the statutory minimum wage level.



Regardless of their union affiliation, we also include non-unionised employees to the collective agreements of the chemical industry in the Hesse/Thuringia collective bargaining area in their employment contracts.

We resolutely oppose intolerance and discrimination. Our work regulations, our code of conduct, our anti-discrimination agreement and our integration agreement provide employees with safeguards in their day-to-day dealings with one another so that there is no room for violations of human rights. For example, we advertise all positions in recruitment procedures on a gender-neutral basis in order to promote diversity within the company.

Since 2012, a compliance manager has been available to all employees as a neutral point of contact. This is communicated to employees in regular training sessions. However, should there be any breaches of our compliance requirements or other irregularities, we have set up a reporting procedure for our employees so that we can take action as quickly as possible.

In addition, an internal code of conduct provides our employees with reliable guidance on compliance-compliant dealings with each other and with external bodies. As a multicultural company, we benefit from the individuality of each and every one of our employees. Cultural diversity expands our creativity, our global thinking and gives us new perspectives.

### Employment

We provide needs-based training in the natural science, technology and business to promote the supply of skilled workers for the future of the company. By taking on trainees in our company, we secure our need for well-trained specialists. We are committed to measures to combat youth unemployment by participating in relevant programmes such as "Joblinge - gemeinsam together against youth Unemployment". We organise further training and qualifications individually for each professional group or employee. We design our workplaces in such a way that our employees can also carry out their work in production until retirement age. SE Tylose promotes the compatibility of family and career by increasingly creating jobs for mobile working and part-time work. Compared to the industry average, our employees support us with above-average loyalty to the company.

| Aspect               | Classification                               | FY2021<br>(Person) | FY2022<br>(Person) | FY2023<br>(Person) | FY2024<br>(Person) |
|----------------------|----------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Employees            | Number                                       | 569                | 573                | 571                | 557                |
|                      | Number of female employees                   | 74                 | 75                 | 75                 | 76                 |
|                      | Number of part-time employees                | 32                 | 35                 | 29                 | 26                 |
|                      | Number of female employees working part-time | 22                 | 22                 | 21                 | 20                 |
| Age of the employees | 0 - 15                                       | 0                  | 0                  | 0                  | 0                  |
|                      | 16 - 30                                      | 86                 | 88                 | 79                 | 68                 |
|                      | 31 - 45                                      | 198                | 205                | 207                | 202                |
|                      | 46 - 60                                      | 243                | 235                | 232                | 235                |
|                      | > 60                                         | 42                 | 45                 | 53                 | 52                 |

| Aspect                     | Classification                                                                            | FY2021<br>(Person) | FY2022<br>(Person) | FY2023<br>(Person) | FY2024<br>(Person) |
|----------------------------|-------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|
| Affiliation to the company | 0 - 9 years                                                                               | 218                | 217                | 209                | 203                |
|                            | 10 - 19 years                                                                             | 111                | 128                | 133                | 133                |
|                            | 20 - 29 years                                                                             | 97                 | 87                 | 88                 | 79                 |
|                            | 30 - 39 years                                                                             | 107                | 103                | 98                 | 95                 |
|                            | 40 - 49 years                                                                             | 36                 | 38                 | 43                 | 47                 |
| Human rights               | Number of children employed                                                               | 0                  | 0                  | 0                  | 0                  |
|                            | Number of forced labourers                                                                | 0                  | 0                  | 0                  | 0                  |
| Diversity                  | Number of severely disabled employees                                                     | 27                 | 27                 | 25                 | 20                 |
|                            | Number of women in management positions (incl. middle management)                         | 19                 | 20                 | 22                 | 23                 |
| Work-Life Balance          | Balance Number of employees who have taken parental leave                                 | 15                 | 24                 | 22                 | 17                 |
|                            | Number of employees who have been granted educational leave for further training purposes | 34                 | 29                 | 35                 | 34                 |

### Occupational safety and protection of health

We are certified in accordance with ISO 45001 'Management systems for safety and health at work'. The procedural instructions for this are part of our integrated management system.

We pursue the long-term goal of "zero accidents". In 2024, we launched a new programme to improve the 'Occupational safety culture'. Analyses of the causes of accidents and discussions with employees have shown that the reasons for the accidents that have occurred are complex. We have identified that an improvement in the prevention of accidents can be achieved primarily by increasing awareness of safe working practices. A concept for the cultural dialogue on safety and health, which is based on the Bradley Curve and the DGUV's 5-stage model, was rolled out in 2024. It is intended to promote and sustainably establish a culture of prevention within the company in future.



After a higher occupational accident rate in 2022, we were able to successively reduce this rate in 2023 and 2024, so that we now have a rate of 8.52. Our goal is to continue to reduce this. In 2023, the severity of accidents unfortunately increased significantly compared to previous years. Fortunately, we were able to reduce this significantly again in 2024. In the following table, all accidents at work involving salaried employees that caused at least one day of absence are counted.



| Aspect                         | Classification                                                                              | Unit   | FY2021 | FY2022 | FY2023 | FY2024 |
|--------------------------------|---------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|
| Occupational health and safety | Number of participants in safety training                                                   | Person | 569    | 573    | 571    | 557    |
|                                | Occupational accident rate (number of occupational accidents in relation to working hours)  | -      | 8.49   | 9.87   | 8.69   | 8.52   |
|                                | Accident severity (lost days due to occupational accidents in relation to productive hours) | -      | 0.083  | 0.046  | 0.215  | 0.008  |
|                                | Number of work-related fatality of employees                                                | Person | 0      | 0      | 0      | 0      |

We use e-learning software to instruct our employees, which covers all topics for which there are legal requirements. In addition, further topics from all other areas of environmental protection, occupational health and safety and energy efficiency are offered. There are currently over 240 different modules available for training. Employees successfully completed around 12,500 training sessions in both 2023 and 2024. We also offer our employees preventive and health measures to prevent workplace-related and general health risks.

In order to intensify these efforts, we have established a Corporate Health Management, which offers targeted health promotion and prevention programmes for all employees. This benefits the company - which can only be successful in the long term with healthy and committed employees - as well as the employees, as health ultimately improves the quality of life in all areas.

The goals of Corporate Health Management are:

- ▶ Health Promotion
- ▶ Increase of employee satisfaction
- ▶ Increasing well-being
- ▶ Promoting motivation
- ▶ Strengthening identification with the company
- ▶ Improvement of the working atmosphere

### Further development of our employees

We see our mission as providing cellulose ethers that are crucial for improving people's quality of life and for sustainable applications in everyday life. We have highly motivated employees who work every day to achieve these goals. Our success is based on the knowledge, energy and passion of these people. We foster a culture where everyone is respected, valued and has an equal opportunity to contribute. We invest in the development of our employees through training programmes, interactions with managers and various career development opportunities. We are proud of our colleagues who are committed to working towards our goals.

### Attractive employer

The key to our success is our committed employees, many of whom have been with us for many years. As a member of the HessenChemie employers' association, we offer our employees the benefits of collective bargaining. In addition to an attractive basic salary, this includes various pension schemes, guaranteed bonuses and supplementary company nursing care insurance. We enable a healthy work-life balance with additional time off for older employees, above-average holiday and leisure time quotas, flexible working time models with digital networking in the home office and the opportunity to save up working time credits in long-term accounts. We honour long-term loyalty to the company and encourage the recruitment of older employees. Every year, we train apprentices, offering them secure jobs after successful completion and supporting them in their further professional development. We train the majority of our future managers ourselves. We round off our image as an employer with our company health management system and an occupational health centre. We will continue to be a reliable and attractive employer for our employees in the future, offering our own training programmes and being committed to collective wage agreements.



## 3.4 Social commitment

SE Tylose feels connected to its community and social environment. Maintaining good neighbourly relations with associations, institutions and local residents is a prerequisite for acceptance and understanding with regard to the company's business activities. When making donations, we focus primarily on our immediate neighbourhood in Wiesbaden-Biebrich and Mainz-Amöneburg, and in individual cases also on people in need in other regions who are suffering from wars or natural disasters. SE Tylose's social commitment in 2024 focused on various charitable organisations and educational institutions.

SE Tylose employees demonstrated their social commitment by actively participating in campaigns such as 'Wiesbaden Engagiert!', the 'Girls' and Boys' Day at SE Tylose' and the 'Rhine Clean Up'.

There has been a close and long-standing relationship with the neighbouring Johann Heinrich Wichern School with a focus on children with special mental needs in Amöneburg for many years. As part of the 'Wiesbaden Engagiert!' campaign, SE Tylose has been renovating a part of the building with a new coat of paint every year since 2011.

We also support the Wiesbaden children's hospice Bärenherz and other regional and international aid organisations with donations.



## Legal notice

### **Publisher**

SE Tylose GmbH & Co. KG  
Kasteler Straße 45  
65203 Wiesbaden

### **Responsible under press law**

Dr. Diethart Reichel

### **Editorial departement**

Task Force Sustainability SE Tylose GmbH & Co. KG

### **Layout**

Very Interactive Sales Tools GmbH

### **Contact**

SE Tylose GmbH & Co. KG  
Kasteler Straße 45  
65203 Wiesbaden  
[sustainability@setylose.com](mailto:sustainability@setylose.com)  
[www.setylose.com](http://www.setylose.com)

### **Photo credits**

SE Tylose GmbH & Co. KG  
Rüdiger Dunker  
Dr. Eckart Krämer  
Oliver Rütther  
InfraServ GmbH & Co. Wiesbaden KG  
SDI Productions

Wiesbaden, July 2025