



# 2024

## ANNUAL REPORT

# TABLE OF CONTENTS

Foreword **03**

REACH Restriction  
- Training platform **04**

OEL for  
Diisocyanates **07**

Cohort Study **08**

Chemical  
Regulation Cluster **09**

Product  
Stewardship Cluster **10**

Sustainability  
Cluster **12**

Combustibility  
Cluster **13**

Communications **14**

ISOPA on stage **15**

Team News **17**

Thank you **18**

# FOREWORD

Looking back on the past year, the diisocyanates industry continues to demonstrate exceptional resilience in the face of numerous challenges, from geopolitical tensions to rising energy costs. Despite these hurdles, our industry has remained steadfast in its dedication to responsible practices and sustainability. Polyurethane continues to play a crucial role in sustainability, with new breakthrough applications and innovative recycling technologies enhancing resource efficiency and facilitating circularity.

At ISOPA, it has been a year marked by significant milestones in our pursuit of a safer, more sustainable industry as well. We've made considerable progress in strengthening our diisocyanates safety training efforts and advancing sustainability initiatives and communications. These efforts are foundational to ensuring the long-term resilience and continuous growth of our industry for years to come.

**Christopher Metz**

President



**Jörg Palmersheim**

Secretary General

The year 2024 has been a pivotal one for the ISOPA office. Our constructive dialogues with policymakers have paid off with the adoption and entry into force of the EU Occupational Exposure Limit values for diisocyanates. Additionally, the dedication of our staff to enhancing the safety training platform has come to fruition in an ever growing network of trainers and safety experts, while our communication efforts to highlight the benefits of polyurethane in fostering a sustainable future continue to reach an increasingly wider audience.

Throughout the year, our working groups have remained focused on delivering key priorities, including product stewardship, sustainability, combustibility, and chemical legislation. I am deeply appreciative of the collective contributions of our members and stakeholders, whose commitment continues to propel our industry forward.



# REACH RESTRICTION

## A successful digital training platform

It has been a year and a half since the REACH restriction on diisocyanates came into effect in August 2023. ISOPA is proud to say over 800.000 workers have now registered online via the digital Safe Use Diisocyanates training platform on [www.safeusediisocyanates.eu](http://www.safeusediisocyanates.eu). This milestone reflects the industry-wide commitment to safety and compliance.

Over 2024, ISOPA has also been reviewing the training material and plans to launch the new 2.0 version in 2025 to make the training more accessible and interactive without amending the content. The material will be updated language by language, first covering the top most used trainings.

over  
**800,000**  
Online registrations

## Safe Use Diisocyanates goes global!

ISOPA has been working hard to expand the Safe Use Diisocyanates training to a global scale to deliver valuable training to workers worldwide. We have created a new globalised version of the [digital training platform](#), which has gone live from February 2025, and runs alongside the EU website. The global website includes new globalised versions of the general safety training and will become available in multiple new languages, including: Hindi, Mandarin, Japanese, Russian, Arabic, and Turkish.



[www.safeusediisocyanates.com](http://www.safeusediisocyanates.com)

## A growing network of trainers

In parallel to online courses, ISOPA has helped the value chain organize training on-site. To do so, ISOPA provides access to the training materials to safety and EHS experts. These trainers can subsequently organize trainings in-house or to other companies.

At the same time, it has been over one year since ISOPA initiated the Train-the-Trainer program in July 2023, and it remains a tool used by many to promote worker safety. The objective of these courses is to train experts to become a safety expert on Diisocyanates being capable to provide safety trainings themselves related to the REACH Restriction on diisocyanates. To guarantee excellence in these courses, Jörg Palmersheim has been certified as a TÜV Trainer. The sessions were held online in both English and German, training 37 new trainers in 2024.

We are happy to say that 222 external and internal trainers now offer sessions throughout the EU.

**37**

New trainers trained in 2024 via Train-the-Trainer programme

**222**

Total external and internal trainers

**34**

Total license agreements



## New license agreements

ISOPA continues to engage with multinational companies interested in integrating our training materials into their own Learning Management System. Multiple new agreements were signed in 2024, leading to a total of 34 agreements by the end of the year. We are pleased to see that such companies value the quality of our materials.

# OUR TRAINING PLATFORM IN NUMBERS SINCE ITS LAUNCH

**803,500**

Online registrations

**222**

Internal and external trainers

**127**

Train-the-Trainer participants

**36**

Different training courses

**34**

Licence agreements signed

# OCCUPATIONAL EXPOSURE LIMIT FOR DIISOCYANATES

The Directive setting the Occupational Exposure limit value (OEL) for diisocyanates was published in the EU Official Journal on 27 March 2024, and Member States now have until 9 April 2026 to ensure national compliance. Until the end of 2028, transitional values (20  $\mu\text{g NCO}/\text{m}^3$  as STEL and 10  $\mu\text{g NCO}/\text{m}^3$  as TWA) are in place. From 2029, the final values (12  $\mu\text{g NCO}/\text{m}^3$  as STEL and 6  $\mu\text{g NCO}/\text{m}^3$  as TWA) will count.

ISOPA has been involved in the legislative process from the outset, providing scientific evidence to support an appropriate approach by legislators. Overall, ISOPA has consistently advocated for EU-wide harmonization of the OEL, ensuring that all Member States comply with the established values and transition periods, thereby preventing a fragmented landscape of individual substance OELs.

Thanks to the dedicated efforts of ISOPA, its member companies, experts, and relevant Downstream Associations, we are proud to conclude that the final legislation is appropriate and the additional cost burden to the industry is manageable.

In the coming years, our primary role will be to monitor the implementation by Member States and provide support to the industry and professionals where necessary.



# COHORT STUDY

## Overview

In 2023, the cohort study was kicked off under the leadership of the Research Institute for Prevention and Occupational Medicine of the German Social Accident Insurance Institute of the Ruhr University Bochum (IPA Bochum). The objective is to record the prevalence and incidence, conduct exposure assessments, describe the dose-response relationship, and test the effectiveness of REACH training. The examination panel of the study includes interviews, air sampling, internal exposure assessments, skin assessments, and assessments of the respiratory system.

## Current progress made

**27**  
Companies

**421**  
Participants

In October 2024, the project lead presented an extensive intermediate report detailing the progress of the study. A total of 27 companies were visited, with 421 participants, a lower number than expected at the end of the feasibility study. This is mainly caused by a lack of feedback and interest, economic factors, as well as a lack of exposure due to automation and infrequent uses. Low numbers of exposed employees at long distances also posed issues. In addition, the scheduling of training and costs associated with this, language barriers, and SARS-CoV-2 measures had an impact.

While the intervention part of the study and the active contacting of companies by IPA have now been completed, company participation is still possible in 2025 as an open cohort. Moreover, the final data set of the intervention part has been generated, covering 15 company locations and 235 participants. The analysis, including biomonitoring in urine, is still pending and report of all medical examinations are being generated whilst data from all examinations are collected and consolidated.

At the moment, an evaluation plan is being generated, which will include descriptive, hypothesis-driven, and specific questions. Interviews will still continue going forward.



# CHEMICAL REGULATION CLUSTER

The Chemical Regulation Cluster (CRC) has been actively discussing current legislative actions and proposals in its biannual meetings and intermediate calls.

The discussions primarily focused on key elements of the Chemicals Strategy for Sustainability which are expected to be included under the upcoming revision of the REACH Regulation. These include the 'Generic Risk Assessment' (GRA), 'Mixture Assessment Factor' (MAF), 'Essential Use Concept', and the registration of polymers, which are particularly crucial topics for ISOPA.

The CRC also discussed the implications of various restrictions such as PFAS and microplastics, and other work conducted by ECHA on isocyanates. In particular, the CRC focused on ECHA's expected request for TDI testing via the oral route, as well as the follow-up work done by ECHA based its Assessment of Regulatory Needs (ARN) Report on isocyanates, published in June 2023. The CRC has actively discussed these topics over the past year, and has, on the latter, engaged with ECHA to provide ISOPA's position.

Further environmental and chemical legislative developments, such as the Drinking Water Regulation and CLP regulation were also covered by the CRC.

ISOPA members and experts are contributing to the support of industry associations like Cefic in their advocacy efforts. Additionally, the work of partner associations is closely monitored and supported as needed. The CRC is also monitoring the policy developments in other regions of the world, particularly focusing on the development of Occupational Exposure Limit (OEL) regulations and restrictions on isocyanates.

# PRODUCT STEWARDSHIP CLUSTER

The Product Stewardship Cluster met multiple times over 2024 to discuss and coordinate the ongoing work of ISOPA's different product stewardship programmes such as 'Walk the Talk' and 'One Step Ahead' which are now merged under the umbrella of 'Safe Use of Diisocyanates', providing a streamlined approach to promote safety across our industry. At the same time, the Cluster discussed the various ongoing developments around the Safe Use Diisocyanates training platform and chemicals legislation, such as the new EU OEL.

## Logistics Working Group

In the past year, the Logistics Working Group has continued its commitment to safety and environmental stewardship within the polyurethane industry. In particular, multiple train-the-trainer sessions were organized by our Member Companies to guarantee the safe transport of diisocyanates.

In parallel, the working group has worked hard to update the ISOPA logistics bulk guidelines on the safe loading/unloading, transportation and storage of TDI and MDI. The updated guidelines, which are to be published in Q1 2025, include key updates regarding the communication between operator and the driver in with the European legislation, highlighting the preferred unloading method (pump with vapour return), and new pictures and visuals, as well as links to instructional videos.

**Logistics**

safety in action



## OSA Working Group

ISOPA's One Step Ahead (OSA) working group has been actively promoting the safe use of diisocyanates across Africa and the Middle East.

In particular, ISOPA organized a full-day workshop focused on the safe use of diisocyanates in Johannesburg – South Africa. The event brought together experts from ISOPA Member Companies and key industry players to discuss various aspects of Environmental Health and Safety (EHS).

Topics covered included the proper use of Personal Protective Equipment (PPE), best practices for handling diisocyanates in the workplace, and further information on the Safe Use Diisocyanates training platform. The workshop was well attended and underscores our industry's commitment to achieving the highest safety standards.



**one  
step  
ahead**

**Safety in Action**

# SUSTAINABILITY CLUSTER

Over the past year ISOPA has greatly increased its focus on sustainability. In particular, ISOPA has worked to promote the Mass Balance approach and chemical recycling as key pathways to a sustainable chemicals industry, whilst highlighting the already ongoing work by our industry to make the green transition a reality, through our communications campaigns.

## Eco Profile update

ISOPA decided to update the Eco Profiles for MDI, TDI and Polyols, last updated in 2021. The Eco-profiles are prepared according to Eco-profiles program and methodology – PlasticsEurope – V3.0 (2019). ISOPA is working together with Sphera, Carbon Minds, and Ecoinvent to complete the update. ISOPA has concretely started the work on the Eco Profile update already with Sphera, and is simultaneously in talks with Carbon Minds and Ecoinvent.

## Sustainability legislation

The Ecodesign for Sustainable Products Regulation (ESPR) was published in the Official Journal in June 2024, and has been a highly discussed sustainability topic over the past year, both by EU institutions and stakeholders. The ISOPA Sustainability Cluster has closely monitored the ongoing developments. ISOPA has also taken on an active monitoring role on other key sustainability files including the end of life vehicles Regulation (ELVR), as well as global policy developments such as the ongoing negotiations around the UN Plastics Treaty.



# COMBUSTIBILITY CLUSTER

The Combustibility Cluster continued its work focusing on several key areas to advance fire safety in polyurethane applications. Additionally, the cluster engaged in strategic partnerships through the Modern Building Alliance to influence fire safety policies and standards.

An important development was the Grenfell Tower Phase 2 Report, which was published alongside other studies and reports in September 2024. The Combustibility Cluster has been monitoring the various investigations and follow-up work. ISOPA and member companies also supported the MBA, which has been set up to deal with most issues related to Grenfell. ISOPA's additional focus has been on polyurethane issues that are not covered by MBA.

To characterize the accumulated hazards associated with the inhalation of gases typical of combustion products, a time-integrated value known as the fractional effective dose (FED) is used. This FED is maintained by the International Standards Organization (ISO) and documented in ISO document 13571. The Combustibility Cluster has been working on the proposal for the renewal of the ISO norm, which was developed in Working Group 5 PREDICTION OF TOXIC EFFECTS OF FIRE EFFLUENTS under ISO/TC 92. ISOPA experts supported the development of a new version of the proposal, which if approved, will co-exist with the old calculation in one standard.

# COMMUNICATIONS

In the past year, ISOPA's communications efforts have seen remarkable achievements across various platforms. We updated and increased our social media presence, particularly on [LinkedIn](#), with frequent posts and new designs, seeing good growth in our following. If you want to stay up-to-date on the latest ISOPA developments as well as key sustainability and safety news, follow us on LinkedIn!

**3700**

Views per month on  
[www.polyurethanes.org](http://www.polyurethanes.org)

With various new articles published on the website [www.polyurethanes.org](http://www.polyurethanes.org), it continued to draw a high number of visitors, averaging around 3700 views per month, further solidifying our position as a key information hub for the industry, especially on the topic of sustainability.

In addition, our regular newsletters, including a newly designed Safe Use Diisocyanates newsletter, have kept our members and stakeholders informed about the latest activities and developments within ISOPA and the diisocyanates safety training platform.

Similarly, the publication of policy briefs has provided valuable insights into the regulatory landscape in Brussels. Our statements and press releases were echoed in various media channels in our industry such as PU Magazine, PU Today, and PU News.

Moreover, ISOPA has been active in various events, notably showcasing our digital training platform to promote best practices and innovation within the polyurethanes industry. In this regard, ISOPA has also worked to promote diisocyanates safety training in EU Member States, particularly aiming to reach SMEs. We have done so via a national SuD outreach campaign, including social media posts and a comprehensive informative safety training flyer.

LinkedIn®



# ISOPA ON STAGE



## Center for the Polyurethanes Industry (CPI) Atlanta, USA

## ISOPA Product Stewardship Seminar Johannesburg, South Africa



## Technical Polyurethanes Congress Istanbul, Türkiye

## Asian Polyurethane Business Association (APBA) Bangkok, Thailand





## Foam Expo Europe

Stuttgart, Germany

## PDA Europe

Maasmechelen, Belgium



## UTECH

Maastricht, Netherlands

## Polyurethane Technology International Forum

Shanghai, China





# TEAM NEWS

## Saying farewell to Briec and Iva, and welcoming Jelle and Martin!

Our dear colleagues Briec Lits and Iva have embarked on their new journeys elsewhere. Both have been an invaluable part of our team, with their dedication and expertise having been truly appreciated.

As we bid farewell to Briec and Iva, we also extend a warm and enthusiastic welcome to their successors, Jelle Verheij and Martin Piscina as Public Affairs and Communications Officer and Marketing and Sales Assistant, respectively.

With these new faces, the ISOPA team now looks like this:

From left to right: Martin Piscina (Marketing and Sales Assistant) Jörg Palmersheim (Secretary General), Kristine Dewaele (Senior Counsellor, Office and Project Manager), Jelle Verheij (Public Affairs and Communications Officer).



# THANK YOU TO OUR MEMBERS

As we conclude this year's annual report, we want to take a moment to express our gratitude to our member companies' experts and our Board of Directors that have made our work possible. Your dedication, knowledge, and commitment have been instrumental in advancing our mission and making a meaningful impact.

Through your expertise, guidance, and hard work, we have achieved significant milestones and delivered on key priorities in pursuit of a safer, more sustainable industry.

Thank you for your invaluable support and for being an integral part of our success. We look forward to another year of collaboration and excellence.

EUROPEAN DIISOCYANATE & POLYOL

# Isopa

PRODUCERS ASSOCIATION

Address

**Rue Belliard 65  
- 1040 Brussels**

Email

**main@isopa.org**

Website

**www.isopa.org**



**[www.polyurethanes.org](http://www.polyurethanes.org)**



**[www.safeusediisocyanates.eu](http://www.safeusediisocyanates.eu)  
[www.safeusediisocyanates.com](http://www.safeusediisocyanates.com)**

**BASF**  
We create chemistry



**BorsodChem**  
Chemistry for generations



**HUNTSMAN**  
Enriching lives through innovation

