

March 2022

ANNUAL REPORT 2021



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Political Environment

Once again, the past year has been marked by the Covid-19 pandemic. This sanitary crisis still has a major impact on the way European citizens live, move and work. It also has a deep impact on the political priorities set out by the European Institutions.

With a view on how the world will look like after the pandemic, the EU pushes for a recovery plan that will change the life of citizens as well as of the industry. Health, Digitalization, Green Deal, Farm-to-Fork, or Smart Mobility are priorities on top of the EU agenda, presenting opportunities for the polyurethane industry.

2022 will be a year where the European Commission will move forward with policies that will produce long-term changes for our industry.

Among the policies that the Commission will work on, three topics can be identified as major for the polyurethane industry. First, the Commission will decide on setting a Binding Occupational Exposure Limit for users of diisocyanates. Second, numerous actions from the Chemicals Strategy for Sustainability will become concrete legislative proposals. Third, the “Renovation Wave Strategy” has really kicked off with the goal to double the annual energy renovation rate for buildings by 2030. It represents of course a major opportunity for the polyurethane industry.

All these policy developments are further developed in this Annual Report thanks to our Experts who are working tirelessly to spread the message about how polyurethanes can provide sustainable solutions for the EU.



2022 outlook

2021 was a milestone for ISOPA with the launch of a training platform where users of diisocyanates can get trained to comply with the new REACH Restriction.

Tremendous work has been done by our industry to develop the platform, which is now available in English and German.

A major objective for 2022 will be the availability of the training platform in all EU languages.

In parallel, the EU Institutions have made progress on several policies. The EU Commission has received the opinion of the ACSH regarding the setting of a Binding Occupational Exposure Limit. The dossier will be closely monitored with active engagement from ISOPA as the proposal is expected to be sent to the Parliament and the Council this year.



ISOPA will continue monitoring and engaging on other policies that have gained momentum recently, especially regarding the Chemicals Strategy for Sustainability.

We look forward to working with you on these important topics in 2022!

REACH Restriction

Training Platform

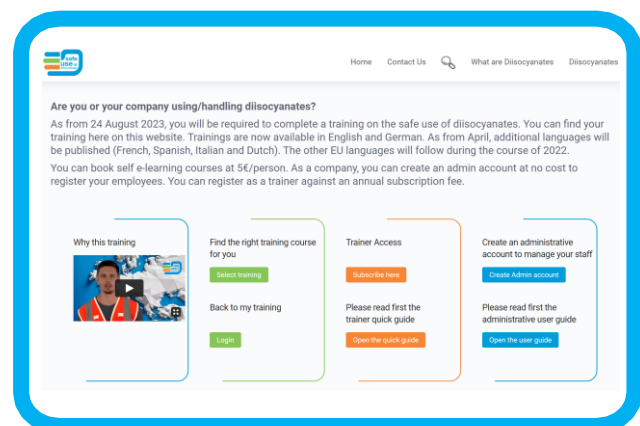
Following the adoption of the Commission's Restriction on diisocyanates two years ago, the industry is working tirelessly to ensure that adequate training can be available to all users of diisocyanates in the European Union.

Together with major Downstream Associations, ISOPA and ALIPA have launched a training platform to ensure that all workers handling diisocyanates could get trained and be compliant with the REACH Restriction. It is the Brussels based digital communication company IDLOOM that was chosen to deliver the platform.

The 1st November was a milestone for the roll-out of the training programme with the go-live of the 'safeusediisocyanates.eu' in English. A month later, the website was also accessible in German.

On the platform, registrants can find the training material that was developed thanks to the remarkable efforts of member company experts and with the help of Frank van Elten, consultant. More than 500 slides and three videos have been created for the various sectors and application technologies, to ensure that all three levels of training are covered.

A new challenge will arise in 2022 with the translation of the platform and the training material to all EU languages during the course of the year. With the support from all our partners, the training programme will play an important part for our industry and will make the handling of diisocyanates even safer for all users.



Cohort Study

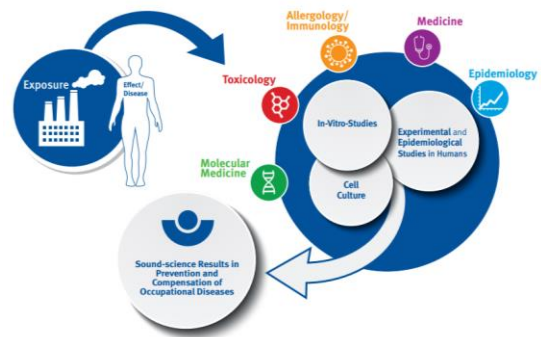
In October all relevant stakeholders took the decision to run a Cohort Study, starting in January 2022 for a time span of 5 years. The project will be led by Research Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr University Bochum (IPA).

The aim of this study is:

- to record the number of work-related respiratory and lung diseases caused by diisocyanates,
- to determine the amounts of diisocyanates which are taken up by employees, to describe the relationship between exposure and respiratory and lung diseases,
- to systematically check the effectiveness (i.e., reduction of exposure and diseases) of protective measures which are specified in the REACH restriction proposal

This project will be important for our industry as it will provide new evidence on the safety of workers handling diisocyanates.

The Study will also fill existing gaps in the scientific literature. As of today, only a limited number of studies look at diisocyanates, with a lack of representativity. The Cohort Study will overcome these shortcomings and provide a solid basis for the study of diisocyanates exposure on a large and representative cohort.



Occupational Exposure Limit for Diisocyanates

The process of setting a Binding OEL for diisocyanates in the EU has evolved in 2021.

On 24th November, the Advisory Committee on Safety and Health at Work (ACSH) has published an Opinion proposing an OEL for diisocyanates. This Opinion was published in support of forthcoming proposals of the European Commission to amend directives on chemicals exposure at the workplace, including the EU's Chemical Agents Directive (98/24/EC).

Adopting an OEL would mean determining a maximum level of exposure to a chemical substance for workers to be considered safe.

ISOPA stresses the need to take into consideration the effects of the upcoming restriction and the results of the cohort study before introducing lower values.

The ACSH Opinion stems from the Working Party on Chemicals (WPC), which brings together interest groups representing workers, employers and governments. Together they have agreed on a value of 12 µg NCO /m³ as STEL with a transition period of 20 µg NCO /m³ until the 1st January 2029.

ISOPA/ALIPA consider that it represents the lowest workable solution for the polyurethane value chain to strive towards the zero-diisocyanates induced-asthma goal.

In 2022, the Commission will need to decide whether they follow the Opinion of the ASCH and propose the same limit values. When an agreement is reached, the proposal will move to the European Parliament and the Council for voting. ISOPA has engaged and is still engaging with all decision-makers involved in the process to ensure the best possible outcome for the industry.

Chemical Regulation Cluster

In addition to the bi-annual meetings, the CR Cluster met on two additional occasions in 2021 to discuss the growing number of legislative topics on diisocyanates and to support the dominant projects at ISOPA: the restriction and the OEL.

Two sets of regulations are of particular interest for the Cluster in the coming years: the Chemicals Strategy for Sustainability and the Polymers Requiring Registration. For these issues, two specific task- forces are operating and a summary of their actions is described further in this Report.

The CR Cluster has also been active on various other topics such as TRGS 430, NLPs, and the Polyol Inhalation Tox Group. The team is continuing the collaboration and joint efforts with CEFIC working groups, I.I.I. and downstream association to monitor any policy developments that could impact our industry.

Global Alignment Task Force

An important task for the Cluster is to ensure that the approach taken by the ISOPA member companies once registering the substances under REACH in the EU (group, read across...) is not jeopardized by a controversial approach in

other countries. In 2021, Korea REACH was under scrutiny, while Taiwan, Turkey, China, Japan, India and Australia were closely monitored as well.

New Zealand OEL

ISOPA became aware that WorkSafe New Zealand has proposed lowering its recommended occupational exposure level for isocyanates and opened a public consultation until 4th Feb 2022.

ISOPA and ALIPA addressed their opinion on the proposed values by sending an official statement to the New Zealand Authorities, which was well received.

Chemical Strategy for Sustainability

The EU's Chemicals Strategy for Sustainability celebrated its first anniversary last October. Over the course of the year, the Commission has started working on several actions which will have an impact on the chemical industry.

In an effort to calculate such an impact, CEFIC has published the first results of a broad socio-economic study. The findings show that new policies proposed with CSS could impact 28% of the total industry portfolio.

Given the major impact that CSS can have on our industry, ISOPA has set up an Advocacy Roundtable, which meets bi-monthly to monitor the latest policy development and to coordinate advocacy actions.

A list of priorities for ISOPA has been set with a focus on:

- Mixture Assessment Factor (MAF)
- The essential use concept
- The registration of a sub-set of polymers (PRR)
- Generic Risk Assessment and Professional Uses
- Information on the overall environmental footprint of chemicals

The Roundtable keeps the Board informed on these priorities with a monthly CSS Newsflash.

In 2022, ISOPA will continue monitoring CSS developments and will continue to engage with the EU Institutions on those topics to make the voice of our industry heard.



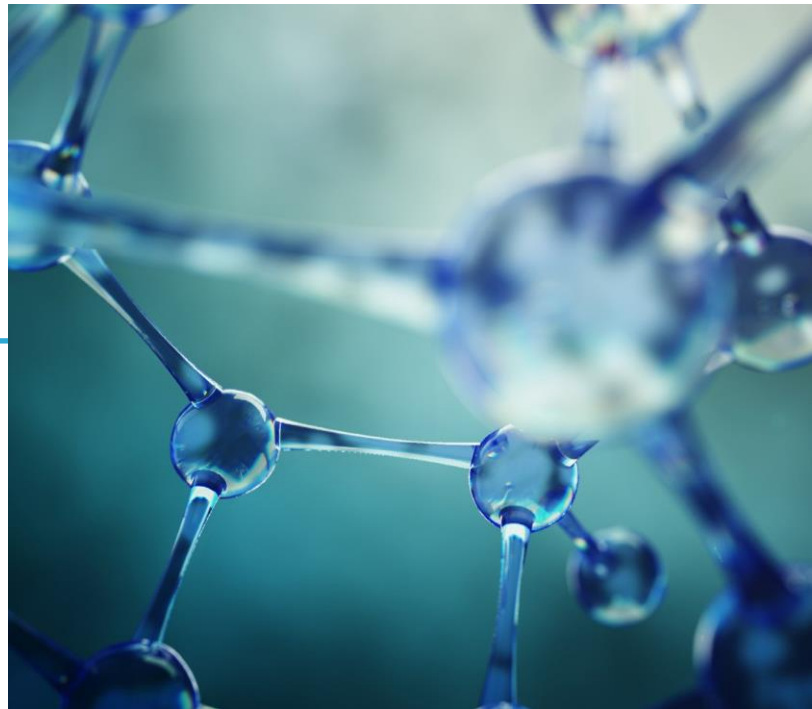
Polymers Requiring Registration

The task force on Polymers Requiring Registration, which was started in 2020, continued to work with the main objective of ensuring that the specific chemistry of diisocyanates is being considered when defining those polymers which would require registration.

The task force met 5 times in 2021 and will continue meeting every other month in 2022.

Part and parcel of the PRR task force is to attend the Subgroup Committee for Polymers Requiring Registration under CARACAL, with Martin Klatt and Gitta Egbers representing respectively ALIPA and ISOPA in those committees.

The main message being conveyed to the decision-makers is that the majority of our polymers can be identified as polymeric precursors, which are well controlled in the industrial environment and should therefore be excluded from the registration requirements.



Product Stewardship Cluster

Driver Training

On the 1st of December, ISOPA launched a new platform to train drivers for the safe transportation of diisocyanates in Europe.

The system has been improved to satisfy the highest safety standards and regulatory developments, but also to digitalize and automate the process.

The new platform offers new options and gives greater autonomy for trainers and administrators to manage the training and the certification of their drivers:

- The new training package includes new content in 11 languages, including videos.

- Trainers can now manage their drivers' profiles, add or remove them from the database to invite them to trainings.

- Once the training is done, the driver can do his test online to obtain his certificate valid for 3 years.

- Tests are available in 11 languages and can be completed on a smartphone or a computer. After the test is successfully taken, a certificate with a QR code is automatically created. The new certificate will progressively replace the existing cards, which will remain valid until their expiry date.

- Certification checks are now possible directly at every (un)loading station with the QR code or via the URL link mentioned on each certificate.



Logistics

The Logistics team had to decide to cancel the Carrier Day that was scheduled in June 2022 in Tarragona. Given the uncertainties on travel restrictions, it was deemed safer to organize the Carrier Day online. The new date for the event has been set on the 22 October 2022.

Beside the digitalization of the driver training platform, the Team has also continued working on other topics including the update of the ER Guidelines, which will be published in the course of 2022.

One Step Ahead

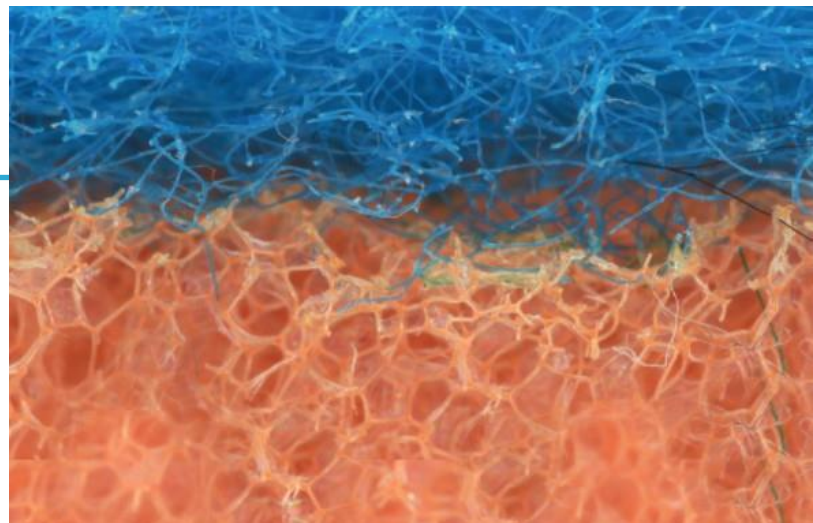
Since the Covid-19 pandemic broke out, the Team has decided to organize all Product Stewardship meetings for Africa and Middle East online. A first webinar took place in 2020 followed by three more in 2021.

For 2022, two virtual sessions are already scheduled, one in English (on 9 March) and one in French (Q3). In parallel, the team is working on updating the OSA slides.

Walk the Talk

The team dedicated their work almost entirely to support the development of the training material and the training platform under the restriction on diisocyanates

In 2022, the team will discuss the future of Walk the Talk in light of the go-live of the training platform.



PU Sustainability Cluster

Integration of the Circular Economy TF

With the view to improve efficiency and better coordinate actions, it was decided that the Circular Economy TF would be integrated to the PU Sustainability Cluster. The Cluster, which was meeting twice a year, will convene every two months.

The scope of the Cluster will now cover the topics previously handled by the Circular Economy TF. The work agenda of the Cluster is expected to be dominated by the EU Green Deal for a foreseeable future.

One Voice on Carbon Neutrality by 2050

The Cluster has published a Statement on the objective of reaching Climate Neutrality by 2050. The document was published on all ISOPA channels. In the Statement, ISOPA and its member companies have committed to become climate-neutral by 2050, such as outlined in the objectives of the Green Deal.

To deliver on these ambitions by 2050, ISOPA's member companies have launched a series of initiatives with the value chain to move from a linear model toward a circular model. These initiatives include the use of recycled and renewable resources and recycling technologies to minimize waste and reduce emissions.

Launch of new Eco-profile

The team continued working on the Eco-Profile with an update having been published in April 2021.

There is still on-going work with the Ecoinvent database with the objective to update the data and align them as much as possible to GaBi.

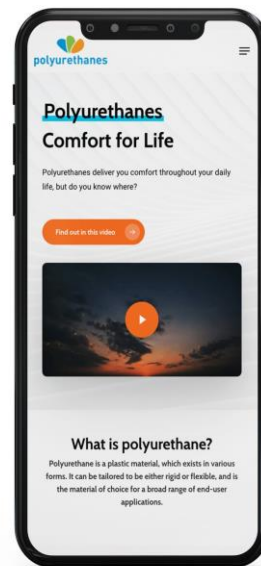
2nd edition of Polyurethane Recycling Study

Following the 1st edition of Polyurethane Recycling Study, it has been agreed to plan the 2nd edition of the study in 2023, so that it uses data from 2022, thus making a 5-year milestone from the first study.

The study will be led by Conversio, a German based consultant company, which conducted the first polyurethane recycling study.

Update of Polyurethanes.org

An objective for the Cluster in 2022 will be to update information on sustainability topics for the website Polyurethanes.org. This review will bring forward cases and examples where our industry is making strides towards circular economy. This update will be conducted with the help of Europur and PU Europe.



Combustibility Cluster

In 2021, the Combustibility Cluster took time to reflect on its objectives and on its role. Since the foundation of the Modern Building Alliance, many technical topics are now handled by respective committees of the MBA. It was thus timely to review the Remit of the Cluster.

All participants stressed the importance and the value of keeping the Cluster and to focus the work on the following topics:

- Keep issue overview of key PU applications & align with Downstream Users;
- Lead on specific smoke tox and environment issues;
- Monitor Flame Retardants;
- Agree on an ISOPA strategy on the topic of standardisation & regulation;
- Crisis communication.

EU Fire Safety Week by MBA

In November, the MBA, in which almost all member companies as well as ISOPA is a member, organised the EU Fire Safety Week. The event aims to raise awareness on fires safety toward EU policy makers, engage stakeholders

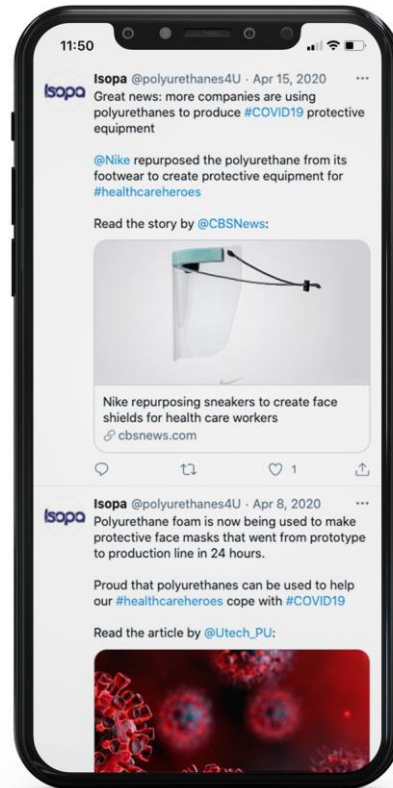
to share best practices within EU Member States, and formulate recommendations to solve gaps in knowledge, data, legislation and standards related to fire and electrical safety.

Communication

2021 Highlights

A majority of the communication efforts in 2021 were geared towards informing our stakeholders that the Training Platform was live and ready to be used as of 1st November. ISOPA published numerous press releases that were picked by many PU news outlets such as PU Magazine, Urethanes Technology, FAPU, and even in the Italian magazine Polimerica.

Another highlight of the year was the UTECH event that took place in Maastricht in November. The exhibition gave a platform for ISOPA to spread the message about the REACH Restriction and the launching of our Training Platform. It was also an opportunity for our President Chris Metz to give a speech on the future challenges facing the polyurethanes industry such as the Green Deal and the Chemicals Strategy for Sustainability.



Communication Plan 2022

Whereas in the past ISOPA was relying on the support of Fleishman Hillard to conduct their communication activities, the appointment of a new communication officer means that most of them will now be done in-house.

ISOPA will keep sending weekly news reports, quarterly newsletters and the annual report. A growing presence on social media is also an objective for the ISOPA Team.

Last but not least, the major objective for ISOPA in terms of communications for 2022 will be the creation of a new website, which will offer a modern design and allow its management in a much swifter way.

ISOPA Team

After many years of leading the GA and the Board of Directors, Mike Fowles, Huntsman, and Herman Motmans, DOW, left the ISOPA Leadership Team.

ISOPA is pleased to announce that in June, the General Assembly decided to appoint Christopher Metz, BASF, as their new President and Erik Vangronsveld, Huntsman, as their new Vice-President.



Christopher Metz
PRESIDENT



Erik Vangronsveld
VICE-PRESIDENT



Since October, the ISOPA Office has a new employee. Brieuc Lits has joined as Communication Officer. His responsibilities notably involve the external and internal communications of ISOPA and the monitoring of the Chemicals Strategy for Sustainability. Prior to joining ISOPA, Brieuc worked in academia earning a PhD in political communication from the Université libre de Bruxelles.

After more than 20 years another major cut was made at ISOPA when contracting a new IT Service Provider, named itweak, based nearby Brussels.

Final Remark

The report is intended for internal use only. The report shall not be shared outside member companies and therefore also password protected.

All the work outlined in this Report is done with the tremendous efforts of our member company experts:

BASF

Christopher Metz; Gitta Egbers; Thomas Merz; Ulrike Groenhagen; Elif Unterberger; Uwe Blumenstein; Steffen Kahrman; Susanne Demharter; Klaus Wittstock; An Dupon.

BorsodChem

Tibor Klement; Hella Tothne; Anna Fridelne; Nora Janosik; Andrea Cappella; Gyulane Szabo; Dora Stefanovics.

Covestro

Christine Mendoza-Frohn; Hermann-Josef Dörholt; Gudrun Luecke-Brunk; Malik Duhaut; Hans-Georg Pirkl; Lutz Brassat; Tanja Gutschmann; Gesa Dern; Peter Krüger; Ines Krüger; Monika Leutbecher; Thomas Gross; Lutz Brassat; Yvonne Zielesny; Jose Gavira.

DOW

Rajesh Balan ; Herman Motmans; Ronald van den Bosch; Edwin de Souter; Lucie Porcelli; Christine Lucas; Petra Van Haarlem; Claire Andeso; Paul Cookson.

Huntsman

Mike Fowles; Erik Vangronsveld; Shpresa Kotaji; Diane Daems; Bart Bossuyt; Liesbeth Melis; Ronald van der Kooij, Marta Zoladz.

Shell

Wouter Mineur; Els van Eetvelde; Peter Roest; Udeogu Onwusogh; Christophe Vermeulen.

ISOPA Office

Kristine Dewaele; Jörg Palmersheim; Briec Lits.

ISOPA Aisbl
ALIPA Aisbl
Secretary General
Rue Belliard 65
B-1040 Brussels

Contact ISOPA:
Email: main@isopa.org
Visit us: www.isopa.org