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ETRMA Answers to the questions on the survey: Chemicals transition pathway - building blocks survey

Introduction

Rubber is a versatile material flexible and resistant used for many applications. The industry producing rubber products or articles in Europe is organized in two main blocks. The most visible and known is Tyres present in vehicles. The other is the General Rubber Goods (GRG) sector whose main application fields can be summarized as follows: the automotive and transport sector 63%, the industrial appliances sector 8-10%, the household applications 10% , energy / offshore 10-12% , food contact materials 4-5% and leisure 1-2% . The majority of the GRG sector are small medium size companies, SMEs.

The use of chemicals in the rubber industry is of utmost importance, to mention there are more than 1600 substances registered under REACH for its use in the sector of rubber manufacturing. The strong and robust chemical regulatory framework in Europe has placed the rubber industry at the foreground on chemical compliance, and strengthened its position worldwide.

The producers of rubber articles, as downstream users of substances and mixtures to produce rubber goods, are in a unique position in the value chain. Rubber articles are in many cases part of more complex articles serving to a large variety of sectors. This central position in the value chain boosts the industry importance and knowledge on legislation on products, articles, chemicals and mixtures.

Q.2.2. How could planned revision proposals (e.g. of REACH and CLP) improve the twin transition and the resilience of the chemicals sector?

Access to raw materials could be hampered by overdemanding registration requirements

Rubber articles used in automotive aerospace, oil and gas or construction, to mention some, are required to perform in extreme conditions. Some examples are O-rings in diesel engines, hoses on off-shore installations and tyres for mining, agriculture or aviation. Specific and technical requirements demand the use of particular chemicals and polymers. Some are produced in low tonnages and in some cases imported and acquired for relatively low tonnages. Access to those raw materials is more and more difficult, as beyond global trends on increase production in Asian countries, the COVID-19 crises has drastically hampered the access to raw materials.

Increasing the registration requirements for low tonnage products and polymers could disincentives the import of chemicals, reducing the choice and the options on raw materials for EU rubber manufacturers, and placing the industry in a competitive disadvantage face to non-EU countries with larger production. ETRMA has estimated that approximately 30-40% of the chemicals used in the production of rubber articles are currently registered under lower tonnage or are polymers not registered. The potential impact of reducing the access to 30% of the raw materials used in the rubber industry is not trivial. Therefore, any increase in registration requirements for low tonnages substances and polymers should secure access, agreed transition periods, and address the impacts for niche, specialty chemicals and SMEs.

Rethinking the authorization tittle for REACH in favor of other risk management measures would secure a level playing field for EU manufacturers of articles without compromising safety.

The inclusion of substances in Annex XIV, in essence, requests substitution of the substances which can not be used anymore, except when an authorization is granted. This measure does not affect EU producers of Annex XIV substances, which can continue to produce and export the substances. It does not affect either the use of the substances in non-EU countries neither the import of articles manufactured with the substances and/or containing the substance. The inclusion in Annex XIV targets exclusively EU manufacturers

of articles and mixtures, downstream users. This is particularly concerning when technically performing alternatives are not available. EU manufacturers wishing to produce articles in the EU with the substance, have to apply for an authorization, a tedious and uncertain process that only grants access for a period, if ever granted.

This places EU manufacturers in an extreme competitive disadvantage, particularly when substances are process chemicals, process aids and similar technical functions. Those chemicals are used during the production of articles but not present in the final article or in negligible quantities. Non-EU manufactures can freely use the substance to produce articles and import articles to the EU, while EU producers are pending of an authorization to continue the use of the substance.

This also discourages innovation and investments across the whole value chain, as the lack of security on the use of the substance discourages investment and boosts delocalization of production lines and research and innovation.

The proposal of removing the Title Authorization should be seen as an enabler to secure a level playing field for EU manufacturers of articles without compromising safety. Targeted risk management measures for concerning substances, such as inclusion in Annex XVII, Restrictions, and occupational exposure limits under the CAD 98/24/EC, and CMD 2004/37/EC, will allow equally and ever higher level of protection than inclusion in Annex XIV, Authorization, without compromising EU manufacturers' competitiveness, and boosting the use of alternatives when available.

Generic risk Assessment restrictions proposed under REACH – that are hazard based and not risk based - shall take into account the safe use of the substances and not exclusively a non-defined yet essential use concept

Every chemical used in the production of rubber articles is carefully selected to secure performance including resistance, durability, anti-aging protection, and in some cases, protection under extreme temperatures and pressures. The majority of chemicals used in the production of rubber articles do not meet the requirements of Most Harmful chemicals, such as Carcinogenic, Mutagenic Toxic for Reproduction, Endocrine disruptors to mention. Only a minority of substances meet the requirements as CMR among all the substances used in the production of rubber articles.

Note that this includes process chemicals, aids, impurities and substances present in the value chain of rubber production. The proposal to extend the generic approach to more substances will increase by 40 % the substances used for the production of rubber articles under the generic approach.

The impacts of increasing the application of the generic approach to more hazardous substances are unpredictable, but would certainly damage and affect EU manufacturers' ability to produce rubber articles. Competitiveness will also be affected, as EU producers will lose the capacity to use raw materials that despite of being to some extent hazardous, are high performant, technical and economically advantageous and do not pose a risk when used under adequate risk management measures or when present in products.

In this sense, in the absence of a definition and even an agreement on what the essential use concept is and how to be applied; restrictions that apply the generic approach should target the risk the substance pose and not solely and exclusively be based on the hazard of the substance. The safe use of a substance shall be taken into account.

Equally, considering the serious impacts these restrictions have on society and businesses at large, Annex XV restriction dossier should be done considering all the possible scientifically and recent trustworthy sources and information, remaining the referent on state-of-knowledge and expertise, a goal that requires time, effort, dedication and adequate consultation with stakeholders. Such a process is incompatible with fast-track procedures.

It is positive to increase the information on hazardous substances across the value chain with the inclusion of new hazard classes. However, the inclusion should aim to be a global harmonization with affordable, robust and agreed tests and methods.

Every chemical used in the production of rubber articles is carefully selected to secure performance including resistance, safety, durability, anti-aging protection, and in some cases, protection under extreme conditions such as temperatures and pressures.

The majority of chemicals used in the production of rubber articles do not meet the requirements as Endocrine Disruptors (ED). Only a minority of substances such as process aids, impurities and substances present in the value chain of rubber production meet the requirements of ED. The amount of substances that could potentially meet the ED criteria in the future, if suspected ED are finally considered ED, would reach up to a 20% increase. The lack of reliable information impedes producers of rubber articles to have trustable information to redirect efforts. Similar conclusions can be drawn with other hazard classes such as PBT, vPvB to name some.

The proposal to include new hazard classes under the CLP is promising and advisable. Setting trustable, reliable and agreed criteria to classify substances and mixtures will increase the information and safety provisions across the value chain. It will benefit rubber producers, placed in a central position between substances / mixtures and articles for many sectors such as automotive, aerospace, construction and oil and gas to name some.

However, the benefits of having new hazard classes could be undermined with no trusted, no-feasible and unaffordable set of criteria to define new classes. Too demanding conditions and too strict methods would increase the number of substances that meet the ED, creating confusion and hampering the ability, the feasibility and the flexibility of manufacturers of articles to focus efforts.

Further, introducing new hazard classes in Europe that are non-globally harmonized risks of creating a false impression of security across the value chain. In the absence of an EU harmonized classification, the information on new hazard classes will in many cases be omitted or not be present in chemicals' supporting documents, like safety data sheets, of substances or mixtures imported from non-EU countries. Manufacturers and end users of rubber articles, that wish to use non-classified chemicals, might take no-information as no-classification, creating a false impression of absence of risk across the value chain.

Enforceability.

The current process of REACH restrictions does not take into account whether enforcing the restriction is possible. For some restriction, like the currently under discussion on the presence of PFHxA in articles including rubber containing fluoropolymers, there are not publicly available test methods to measure the content of those impurities in rubber matrices. There are private methods to measure the content in rubber, but lack in many cases of a comparative assessment on how sensitive and effective those methods are. No having a clear way to enforce the restriction hampers the application by Member States of the restriction, and affects value-chain relations. This is an example of a lack of enforceability

The REACH restriction process shall actively the enforceability of the process and address how practically can be applied

The criteria to classify mixtures should remain affordable and adaptable to all shapes, sizes, textures and matrices of chemistry. The implementation of a Mixture Assessment factor that it is based on hazard will fail in capturing mixtures specificities.

Clarifications on the provisions to classify mixtures should enforce and boost the flexibility to address all the matrices, shapes, compositions and behaviors of chemistry. This is particularly important for rubber mixtures. Rubber has a characteristic matrix effect; chemical substances are encapsulated in the rubber matrix and their migration to outside is limited (these migration rates are substance specific), thus reducing the exposure

of human health and environment . The provision on the classification of mixtures shall embrace and allow flexibility to coherently address the hazards of rubber mixtures, taking into account rubber's matrix effect.

Digitalization of safety data sheets, labels or other requirements should be free open-access and user-friendly.

The use of electronic formats to share information across the value chain and such as safety data sheets or labels already occurs in the rubber value chain. Unfortunately, in many cases, downstream users of mixtures or chemical substances, as rubber articles producers, are requested to purchase a particular software license in order to access to electronic safety data sheets. Having to purchase a specific software impedes a true and broad spread of digitalization and particularly affects rubber SMEs. Digitalization requirements have to go hand in hand with user-friendly software, accessible to everyone with no cost, and comprehensive for basic computer skills users.

Q.2.5. Are there unmet needs for new regulations or standards to realise the twin transition?

Circular Economy: Need to develop an EU-wide End Of Waste Criteria for End-Of-Life Tyre, ELTs derived rubber.

Today the logistical problem of collecting and sorting End of Life Tyres (ELT) has been solved. This collection is done through management companies, the vast majority of these operating under European Producers Responsibility schemes. And as such this valuable waste stream has become available for recycling. However, material valorization represents only 50% of the overall waste stream while it is known that End of life tyre derived rubber for instance is an important source of high quality secondary raw materials within the EU. This has also been recognized by the fact that natural rubber has been deemed a Critical Raw Material within the EU. Supporting the fact that we should keep this material in the supply chain for as long as possible.

There is a large potential to achieve a 100 % material recovery of all end-of-life tyres rubber. However, in order to unlock it, we need a robust and trustable regulatory framework across Europe. Clarifying and harmonizing the criteria under which these materials can cease to be waste is a key enabler to unlocking this potential as it would provide more certainty.

Firstly, it secures that trade across European borders happens normally in equal conditions and with equivalent opportunities across borders while it also reduces the administrative burdens associated with trading. Secondly, and even more important, is secures that the material is accountable for safety and quality criteria. Many regulations, like Declarations of Performance for construction products, or the REACH restriction of chemical substances only apply once the material has ceased to be waste.

Circular Economy: Request for inclusion of a migration threshold on PAHs on Entry 50 paragraph 5 and 6 of Annex XVII of REACH

Entry 50 paragraph 5 and 6 of Annex XV of REACH sets maximum thresholds of PAH content for rubber and plastic products expected to be in contact with the skin under normal and foreseeable conditions of use. The maximum content in weight of any of the listed PAHs is set to 1 mg/kg for articles under the scope and 0.5 mg/kg for toys. Rubber products under the scope of the restriction are for instance tools for domestic use, sportive cloth or footwear. It also includes tiles and carpets made of rubber granules and placed in children's playgrounds or sport facilities. Entry 50 paragraph 8 of Annex XV of REACH states that: "8. By 27 December 2017, the Commission shall review the limit values in paragraphs 5 and 6 in the light of new scientific information, including migration of PAHs from the articles referred to therein, and information on alternative raw materials and, if appropriate, modify these paragraphs accordingly".

ECHA released in October 2020 the Annex XV Investigation Report on the available analytical methods to measure content and migration of polycyclic aromatic hydrocarbons, concluding that it was adequate to investigate further in the light of new studies on migration. ETRMA has called within the last 4 years to launch the process of revision. Applying a risk approach to set a migration threshold would allow products with low and safe migration rates, but higher PAH content, to be compliant with the restriction, securing safe use for consumers. This is of tremendous importance for rubber goods but particularly for end of life tyre derived rubber goods whose migration and conditions of use are safe, yet, due to the hazard base approach of entry 50, are in many cases discarded and not compliant with requirements.

Q.2.8. If the main regulations are too rigid and prescriptive, provide revision proposals to make them more flexible without compromising quality of jobs, safety, consumer protection or other social balance aims of the existing regulations.

We would like to remind the revision of the Industrial Emissions Directive, one of the actions of the Zero Pollution Ambition not mentioned in the slides but of importance for the rubber sector.

The revision of the industrial emission directive should boost European competitiveness and accompany EU manufacturing industry on supporting the Green Deal objectives. ETRMA is keen to play a constructive role in this dialogue with the policy makers and stakeholders, underlining the following key points for consideration

- Without a thorough cost benefit analysis, combustion plants with 20-50 MW should remain under the Medium Combustion Plants directive 2015/2193
- Requirements on hazardous substances in environmental permits would have limited benefits to boost a Non-toxic environment
- Companies need flexibility in a way to achieve CO2 emission reduction efficiently
- Legislative changes would help boosting circularity and resource efficiency at the Tyre and General Rubber Goods production sites

Combustion Plants with 20-50 MW shall remain under the MCP directive 2015/2193

Medium Combustion Plants, MCP, are defined as those with thermal input equal to or greater than 1 MW and less than 50 MW. MCP are used in the manufacturing sites of tyres and other general rubber goods. The Medium Combustion Plants directive, MCPD, EU 2015/2193, includes provision for SO₂, NO_x and PM from conventional combustion plants and gas turbines as well as gas engines. The MCPD fills the gap between the Large Combustion Plants covered at the Industrial Emission Directive and the Eco-design Directive for combustion plants lower than 1 MW. The European Commission described the MCPD as a good example of Better Regulation, designed to be affordable for SMEs, and provides long-term certainty for all. The limits set in the MCP directive effectively cover emissions without creating disproportionate cost on production sites. The European commission impact assessment on the Medium Combustion Plants Directive, SWD (2013) 531, assessed the impacts of aligning the SO₂, NO_x and PM limits for Medium Combustion Plants with Large Combustion Plants limits for the same pollutants, concluding that, same limits will incur in disproportionate abatement cost and a nontangible benefit.

ETRMA supports that vision, the thresholds established under the MCPD strike an appropriate balance between offering adequate control of environmental risks while maintaining the competitiveness of the industry. The regulations and requirements of the MCP directive are the most effective as today for the range of thermal input 1-50 MW.

An inclusion of MCP into the LCP directive will lead to:

- Investment in the range of several million € to upgrade or install new combustion plants
- Long extensive permitting processes which reduce the flexibility of EU enterprises to react on market requirements
- Higher administrative burdens for reporting and monitoring

All in all, ETRMA supports the current scope of the Medium Combustion Plants directive, covering plants of thermal input from 1-50 MW. ETRMA does not support including medium combustion plants between 20-50 MW under the Industrial Emission Directive as large combustion plants, without any proper transparent and accessible Cost/Benefit analysis demonstrating the proportionality of the measure

Companies need flexibility in a way to achieve CO₂ emissions reduction efficiently

Member companies of the EU tyre and rubber industry have set ambitious objectives to reach carbon neutrality. Reaching this goal implies a transition to reduce CO₂ and other air emissions. To achieve this objective effectively, businesses need the flexibility to align between pace, investment needs and selection of the installations to be targeted to turn carbon neutral.

Evaluation of CO₂ emission achievements is important to demonstrate environmental improvement, and is best achieved at a company level rather than a plant level

Legislative changes would help boosting circularity and resource efficiency at the Tyre and General Rubber Goods manufacturing sites

The rubber and tyre industry is committed to resource efficiency, including water and energy consumption. Measures to reduce water consumption and enhance energy efficiency are in many cases applied in the industry, aiming to be as efficient as possible. Defining a one-fits-all BAT for water or energy resource could be challenging technically, dismiss specificities and, ultimately, when targets are too strict and unachievable without large investments, hamper the site and company competitiveness.

Corporations need to address resources in holistic approach with the flexibility needed to attain overall objectives. Flexibility to apply case-by-case solutions and address local needs is essential.

In order to boost circularity and efficient use of resources, we see the need to encourage regulatory actions to give an EU harmonized legal non-waste status to by-products on an EU wide-basis, ensuring a homogeneous approach among the MSs, in line with other legislations such as the Waste Framework Directive, 2008/98/EC. The revision of the Industrial Emission Directive is an opportunity to address the recognition of by-products.



For more information please contact:

Laia Perez Simbor

ETRMA Manager, Chemicals and Health and Safety

l.perez@etrma.org

The European Tyre & Rubber Manufacturers Association (ETRMA) represents nearly 4.400 companies in the EU, directly employing about 370.000 people. The global sales of ETRMA's corporate members represent 70% of total global sales and 7 out of 10 world leaders in the sector are ETRMA Members¹. We have a strong manufacturing and research presence within the EU and candidate countries, with 93 tyre-producing plants and 17 R&D centres.

¹ ETRMA's membership include the following tyre manufacturers: APOLLO VREDESTEIN, BRIDGESTONE EUROPE, BRISA, COOPER TIRES, CONTINENTAL, GOODYEAR, HANKOOK, MARANGONI, MICHELIN, NEXENS Tyre Corporation, NOKIAN TYRES, PIRELLI, PROMETEON, SUMITOMO RUBBER INDUSTRIES AND TRELLEBORG WHEEL SYSTEMS. Furthermore, members include Associations in the following countries: Belgium, Finland, France, Germany, Hungary, Italy, the Netherlands, Poland, Spain and the UK.