

### Response of the Confederation of the German Textile and Fashion Industry (t+m) to Public Consultation on the SEAC Draft Opinion

The Gesamtverband textil+mode represents the interest of 1,400 small and medium-sized companies in the German textile and fashion industry with more than 132,000 employees.

The Gesamtverband Textil und Mode has already submitted comments during the three consultation periods.

As a member of EURATEX we have also actively contributed to the opinion of our European umbrella organisation (EURATEX). We fully support the position of EURATEX and include data and surveys of the German textile industry on socio-economic impacts.

With our statement we underline the EURATEX statement by draw the attention to some additional information we receive from our members (Associations of the German Textile Industry).

### A - General statement / Introduction

The PFHxA REACH-Restriktion puts the high EU- level of protection for EU-Citizens/consumers, workers/occupational safety, environmental protection etc. at high risk to be banned. Many legislative standards, certifications etc. for e.g., protection textiles, EU flamerestistant-material and legislations could not be kept any more in the future.

Also the current restriction proposal bans technical textiles in almost full scale and therefore also technologies for alternative energy production and light transmitting fibres for digitalisation which are main Green Deal targets. This restriction proposal makes even the Green Deal a mission impossible, because of a massive lack of technical suitable alternatives and products.

Evidence in this points could be proofed by the EURATEX PFAS DATA-BASE-List and handed over to the EU-Commission

The restriction proposal on PFHxA submitted by ECHA is of high importance for the German textile industry. We have therefore intensively discussed the restriction proposal with our members - despite the tense situation of CORONA for the companies. We would like to emphasise, that PFHxA is a unavoidaple trace contamination in our auxiliary agents, PFHxA itself is no substance used to create special effects on textiles. The results of the survey of affected companies showed that in quite a few cases nearly the whole product portfolio will be affected by the announced restriction (see Annex to the EURATEX contribution). This includes medical textiles, for critical areas of reusable surgical gowns and drapes, as well as multilayer laminates for Personal Protective Equipment (PPE) against wet, cold, bacteria, viruses, dirt, oil, heat, flame and other external influences relating to care, durability and physiological stress reduction (breathability) as it also concerns high-tech products for environmental protection, automotive, construction and many others.

Together with our European umbrella organisation EURATEX, we have therefore conducted a "Euratex DATABASE" in response to the feedback from our survey (submitted to ECHA as confidential part of the EURATEX statement – 2<sup>nd</sup> consultation period).

From our point of view the draft of requirements and restrictions does not consider the current best available technologies. Manufacturers will face high difficulties in conforming with the tar-



geted requirements (due to regulatory or customer needs). Not only does the intended restriction contradict the technical requirements due to the lack of alternatives in performance during use and after laundry. Alternatives fullfilling the requirements (standards etc.) are not available or still under development. Losing the entire fluorocarbons would also imply that our members would no longer be able to deliver into this market. Personal protective equipment (PPE) applications represent in many cases more than 75% of their product portfolio.

Fortunately, the draft joint RAC/SEAC position on pages 1 - 4 of Annex 1 already contains numerous improvements compared to the original restriction proposal. Thus, according to the current status:

- the scope of application for PPE cat. III should be extended to include categories g), h) and I),
- an exemption for high-visibility clothing that meets the requirements of EN ISO 20471 Class 3 is to be introduced,
- exceptions are made for textiles for use in the engine compartment in the use groups automotive and aerospace industry, and
- a full exemption be granted for medical devices under EU Regulation 2017/745, including reimpregnation.

But there is no doubt that many high-tech applications (such as certain protective clothing or important innovations such as fuel cells with appropriate membrane technology) are still not covered by the exemptions. Moreover, it is also not foreseeable which future applications will still urgently need the unique properties of fluorochemical-based polymers. If C6 fluorochemistry is banned for many essential uses in the EU, the need for applications on this basis will not disappear – rather, entire value chains will be relocated outside the EU with lower environmental standards (environmental leakage) and finished products will be imported or banned if they don't meet the strict regulations. Future innovations on this technological basis will not be possible in the EU. None of this helps the environment, the European innovative strength or even the local labour market, but creates further supply dependencies and may even increase global PFC emissions. The effect of this restriction process on the textile industry is to threaten the existence of numerous EU textile companies, particularly in the area of technical textiles. This means that tens of thousands of jobs in the EU will be lost and that value chains will break. Many of REACH's protective goals for people and the environment are led ad absurdum.

The specialized EU technical textile companies and also EU-textile trademarks will technically not be able to compete with technical textiles from mainly Asian, South and Middle-American markets, which are not controlled by such restrictions. European companies will lose their competitiveness as their products will offer lower performance or often not meet standards.

Textile treatment with fluoro- and fluorinated polymers provides many protective functions for humans and the environment. The already submitted "EURATEX Database" covers more than 150 products and product groups and emphasises that these are used in almost all sectors of the economy. Technical textiles produced in the EU are delivered as crosssectional B2B-products to other high-technology industry sectors in the EU to produce a variety of high value products. Many medium-size EU companies are highly specialized in the field of technical textiles and produce world-marketable products with a specific high performance level.

It is a fact, that products, for which is water repellence in connection with oil, stain, biological, blood and chemicals repellence is essential, this combination of effects can only be provided by fluorinated (side-chain-)polymers. If oil, stain and chemicals repellence is essential there are also no fluorine-free alternatives available.



In order to avoid misregulation and necessary rework, restrictions on the use of fluorinated substances in the textile sector must be implemented with care. The use of PFHxA-containing substances for specific applications cannot be regulated in a simple and all-encompassing way without causing considerable obstacles and damage to Europe as a technology and business location. It is imperative that regulation also assesses the risk and necessity of use.

In the following chapters, we address and justify (in addition to the EURATEX statement) other necessary exceptions.

# **B** – Proposals and justifications for necessary changes to the restriction proposal.

	Suggested derogations
Personal protective equipment	Paragraph XY: Paragraphs 1 and 2 shall not apply to any of the fol- lowing:
	Personal protective equipment intended to protect users against risks as specified in Regulation (EU) 2016/425 of the European Parliament and of the Council, Annex I, Risk Category I (minimum surface tension 27,5 mN/m <sup>2</sup> according AATCC118), II and III, including re-impregna- tion.

#### **B.1 Derogation request: Sector Personal protective equipment**

T+m acknowledges that compared to the original dossier, an extension of the scope of exceptions to the Category III (a), (c), (d), I, (f), (g), (h), (I); restriction is foreseen. However, these still fall short. For the protection of workers and private individuals from hazardous influences risks in accordance with normative requirements, there is an urgent need for an exemption for the entire categories II and III. For Category I the exemption should apply when normative requirements demand compliance with 27,5 mN/m<sup>2</sup> surface tension.

Protective clothing without or poor repellency properties bears the risk of increased water absorption under bad weather conditions leading not only to discomfort but to increased weight and physical stress of the wearer. A product not offering sufficient performance is very likely to be replaced by materials from sources out-side Europe. Repellence effects against soiling, solvents and oil cannot be achieved with the currently available fluorine-free DWR<sup>1</sup> products. These are therefore no substitutes to C6 telomer fluorchemistry. The mentioned repellence is an essential factor for increasing the lifecycle. We want to point out that a long lifecycle and the high number of repeated uses in connection with rental services is an essential part of the EU and national strategies on circular economy. A restriction without technical alternatives would contradict these strategic objectives.

The function of protective clothing used in the context of occupational safety **is to protect the wearer (employee)** from harmful influences during work. This damage can be of thermal, mechanical, chemical or other physical nature. Often, the protective clothing protects against a combination of the hazards mentioned above, this protective function defines the difference between working clothes and protective workwear.

<sup>&</sup>lt;sup>1</sup> Durable Water Repellence



EU framework directive 89/391/EC regulates safety and health protection at work. In order to assess the risks at the workplace, the employer is obliged to carry out a risk analysis (89/656/EEC is implemented in Germany by the Occupational Health and Safety Act (ArbSchG), the PPE Usage Ordinance (PSA-BV) and the Workplace Ordinance (ArbStättV). The risk analysis is located in the Occupational Health and Safety Act §5). In particular, when assessing the possible chemical hazards, only the substances handled in the company/at the respective workplace are considered. The selection of the required protective clothing is the result of the risk analysis. Thus, there is a comprehensive set of regulations which obliges the employer to use only effective protective clothing and to take into account the personal interests of the employee (adapted work shoes, safety glasses with adaption to poor eyesight, non-allergenic protective clothing, etc.). It was not only after the Corona crisis that we came to the conclusion that dependence on the production of important protective textiles almost exclusively abroad could not guarantee a timely and sufficient supply. The production of high-quality protective equipment without the risk of qualitative and quantitative fluctuations must continue to be possible within the EU.

For examples of Category I and II of the PPE regulation see EURATEX statement.

# **B.2 Derogation request: Personal protective equipment for armed forces and in the maintenance of law and order**

	Suggested derogations
Personal protective equipment for armed forces, public rescue and in the mainte- nance of law and or- der	Paragraph XY: Paragraphs 1 and 2 shall not apply to any of the fol- lowing: Textiles used by law enforcement, police, public rescue teams, mili- tary, armed forces and in the maintenance of law and order including re-impregnation.

A lot of highly specialized companies deliver protective textiles to essential authorities like police departments, customs, Federal Border Guard (Bundesgrenzschutz) and fire departments in various European states. Protective textiles for military, police and law enforcement, respectively the protective clothing made of <u>it are excluded from the PPE regulation</u>. Here the requirements are specified by individual tenders and wearers are used to a high performance level. The same can be confirmed for special user groups like for instance agencies for technical relief (THW Technisches Hilfswerk) in Germany. These garments also do not belong to PPE regulation, even the design requirements and correct fit of the garment make it impossible or very difficult for EN ISO PPE certification.

Technical requirements for weather protection equipment for armed forces (e.g., Bundeswehr) contain requirements for oil repellency (AATCC grade 5 or higher after five washing cycles at 60°C). This would make it necessary to adjust public tender specifications under acceptance of lower performance and protection.

Required repellence effects against soiling, solvents and oil cannot be achieved with the currently available fluorine free DWR<sup>1</sup> products. These products are therefore no substitutes to C6 or telomer fluorochemistry. At least C6-fluorochemistry must be applied to fulfill repellent requirements.

The auxiliaries ensure a wash resistant water-, oil-, chemical-, dirt- and blood-repellent finish, which protects the wearer from a variety of dangers. As the basis of the restriction is - as regards the finish of textiles - a contamination of the auxiliary chemicals in traces, i.e., in the



range of micrograms per kilogram (millionth of a gram), we consider it as not balanced regarding the advantage of protecting the lives of people, especially as due to technical solutions even the emission of these traces are minimized.

Bulletproof textile waistcoats only work if they are absolutely dry. This is why this protective workwear is equipped with the highest demands in terms of water repellency, which can only be guaranteed by fluorinated polymers.

#### **B.3 Derogation request: High visibility clothing**

	Suggested derogation
High visibility cloth- ing	Paragraph 8 d): Paragraphs 1 and 2 shall not apply to any of the fol- lowing: High performance high visibility clothing fulfilling the requirements of
	EN ISO 20471.

SEAC's proposal to provide exemptions for products according to EN ISO 20471 (high visible criteria) is, in our view, basically a step in the right direction. We welcome in general, that in the opinion published by SEAC regarding the restriction of PFHxA, an exemption for personal protective equipment (PPE) of EN ISO 20471 class 3 is provided. But – the restriction to EN ISO 20471 class 3 alone would lead to an ambiguous regulation. EN ISO 20471 explicitly allows the combination of garments to achieve a higher class. So, it can occur that a class 2 waistcoat in combination with class 1 trousers will result in class 3 for the whole set. So, a fluorine-finish will not be possible Furthermore, the standard specifies that a waistcoat can achieve a maximum of class 2. For a Class 3, the torso and a pair of limbs must always be covered. In this respect, the exemption has to be extended to all high-visibility PPE category II parts. The use of PFHxA soil release finish means, on average, a doubling of service life and is thus not only an essential aspect of protecting the health and safety of wearers but also an essential aspect of sustainability.

#### **B4. Derogation request: Medical textiles**

	Suggested derogation
Medical Textiles	Paragraph XY: Paragraphs 1 and 2 shall not apply to any of the fol- lowing:
	Woven, knitted and nonwoven medical textiles as specified in Medi- cal Device Regulation (EU) 2017/745 of the European Parliament and of the Council with a minimum performance requirement of >20 cm hydrostatic head according EN 13795 including re-impregnation

The exemptions for medical textiles must include woven, knitted and nonwoven textiles (including re-impregnation). Medical devices (i.e., surgical drapes and clothing) are a 100% business in all european Hospitals. EVERY operation in Europe is required to be "covered" and equipped with surgical drapes and gowns. To protect both patient and wearer, either with disposable (nonwoven) or reusable (woven, knitted) materials. Therefore, the exemptions must be given for disposable and reusable products including reimpregnation. Although market shares in Europe are around 80/20 for disposable and reusable products, the performance of re-usable



products is provided by specialised companies in the context of textile supply for hospitals (bed linen, workwear etc.). Every day only in Germany, around 1,000 tonnes of hospital linen are sustainably reprocessed for disinfection, without which no hospital could operate for more than two days.

Membrane laminates are used for reusable medical products such as surgical gowns and drapes in the high-performance risk classification area. These are designed and certified according to EN 13795 for the protection of patients and medical staff from liquids and microorganisms, some even provide a viral barrier. These reusable textile products are washed and sterilized and can be reprocessed up to 100 times in professional laundry services, reducing the amount of medical waste significantly compared to disposable products. As an accompanying product and for the fulfillment of requirements in standard performance risk classifications, tightly-woven microfilament fabrics are finished with fluorocarbon chemistry to prevent i.a. the penetration of specific liquids which appear in the operating theater. There is no adequate alternative to C6 textile auxiliaries, containing only traces of PFHxA as an unintended byproduct to achieve the relevant performance on these woven fabrics.

Patches that are offered as medical products are also partly equipped with C6 chemicals. This applies in particular to plasters and plaster fabrics, which are offered rolled up. In this case, the fluorine-containing finish serves to make the patch rollable without the adhesive layer sticking to the outside or peeling off the inside. Replacement by other finishing chemicals reduce the durability of the products, especially at warm ambient temperatures. In addition, the adhesive layer would have to be formed with significantly less adhesive force, which would make the use of plasters and plaster bandages questionable in various applications.

Particularly noteworthy are textile carrier systems for transdermal plasters. These patches are medicines. They are stuck to the skin and release an medically active ingredient in a controlled manner.

Textile carrier systems for plasters are equipped with C6-fluorochemicals. This equipment serves to ensure a capable adhesive bond. During the development of these systems, attempts were already made to dispense with fluorine chemicals or to use alternative types of finishing. However, no alternative without C6 finishing came even close to meeting the required durability and adhesive properties of the plasters.

A short- and medium-term replacement of the C6 chemicals on the tissues, which are a component of drugs, would mean, if a viable replacement can be found at all, a new approval of the system, which would not only mean costs of several million Euros in addition to upcoming development costs, but also a development time of 5 to 10 years. These costs would ultimately have to be reflected in the price of the drugs or, if no replacement is found by the end of the use of the C6 chemicals, which is more likely, it would mean the elimination of these drugs.

For more examples see EURATEX statement.

	Suggested derogation
	Paragraph XY): Paragraphs 1 and 2 shall not apply to any of the fol- lowing:
Technical Textiles	Technical textiles, for which a minimum repellence to liquids and dust of 27.5 (mN/m) according to AATCC118 is required

#### **B.5 Derogation request: Technical Textiles**

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To avoid misregulation and necessary rework, restrictions on the use of fluorinated chemicals in Technical Textiles must be implemented with care. The use of fluorinated chemicals for specific applications cannot be regulated in a simple and all-encompassing way without causing considerable obstacles and damage to Europe as a technology and business location. It is imperative that regulation also assesses the risk and necessity of use.

We would like to repeat that PFHxA is a unavoidaple trace contamination in our auxiliary agents, PFHxA itself is no substance used to create special effects on textiles. The industrial use of fluorinated chemicals has led significantly to the further development of technologies and thus, for example, also to the improvement of climate protection, since components can be designed to be more resource-efficient and with less mass, their service life can be increased and, at the same time, maintenance intervals can be reduced.

Without the use of fluorinated chemicals in technical textiles, new future-oriented and sustainable technologies for private and industrial applications would not be possible according to current knowledge.

Technical Textiles with a fluorine-carbon finish are used in many industries, especially when increased ambient temperatures, reduction of frictional resistance or chemical inertness require it. They are therefore often irreplaceable by alternatives in the wide range of applications (see following list) due to the requirements. They are used for the efficient and resource-saving manufacture of products, as well as for increasing service life and reliability. Fluorinated chemicals thus make a decisive contribution to the durability and safety of products. In all of the areas mentioned below, PFAS are necessary to meet regulatory requirements, especially in safety-relevant areas in plants. These must withstand extreme conditions and remain functional over the entire service life (e.g., of industrial plants), which is made possible by the use of flourocarbons.

The finishing of Technical Textiles with fluorinated chemicals is therefore not an end but is essential for the fulfillment of regulatory and normative requirements. We therefore propose to link the restriction for the field of Technical Textiles to a technical value that meets the fulfillment of normative and regulatory requirements and prevents, that applications in entire value chains are excluded.

Technical textiles in this sence is a collective term for textile materials (such as woven fabrics, knitted fabrics, nonwovens, felts) and textile manufactured products made from them (such as protective suits or tents) that are used primarily for their technical and functional properties and not for their aesthetic and decorative character. Thus, this definition serves to distinguish them from traditional textiles used by consumers as clothing and home textiles.

Please note, that if our proposal for "Technical Textiles" will be considered by ECHA, it also includes the proposed exemptions for Filtration materials, this derogation is for sure important.

For the subdivision of the fields of application of Technical Textiles **in the sence of the requested derogation for Technical Texiles**, we refer to the terminology of the TECHTEXTIL, the International Trade Fair for Technical Textiles and Nonwovens, which is frequently used today:

**Agrotech:** including textiles for agriculture, horticulture and forestry, such as cover textiles for early harvesting and insect protection, shading fabrics and knitted fabrics, textile irrigation systems.



**Buildtech:** including textiles for building construction such as reinforcement fabrics, textile facades, membranes for lightweight load-bearing structures, fabrics for wind protection (facade and sarking membranes), trickle protection and sun protection textiles.

**Clothtech:** including components for clothing and footwear, such as nonwoven interlinings, shoulder pads for clothing, shoe stiffening materials, wind and weather protection liners

**Geotech:** mainly geotextiles for civil engineering (earthworks, road construction, railroad construction, hydraulic engineering) and horticulture and landscaping, e.g., drainage nonwovens, erosion control mats, separation layers, planting aids

**Hometech:** e.g., textiles for interior fittings and furnishings, ceiling and wall coverings, sun protection textiles, such as awnings, ceiling suspensions, furniture components

**Indutech:** including textiles for the (chemical) industry and electrical engineering, e.g., textilelaminated molded parts and pipes, filter nonwovens and fabrics, electrical insulation materials, surface nonwovens, trans-port belts

**Mobiltech:** including textiles for automotive engineering, rail vehicle construction, shipbuilding such as safety belts, airbags, tarpaulins, wall linings, components for reinforced plastic parts for ship and boat building

**Oekotech:** textiles for environmental protection such as soil sealing in landfills, textiles for waste water and air filters

**Packtech:** packaging such as tea bags or desiccant bags, sacks, mobile containers, protective covers, etc.

**Protech:** including protective work clothing, chemical protective suits, personal protection equipment such as bulletproof vests, military clothing such as NBC protective suits

**Sporttech:** including sports equipment, sportswear such as climbing rope, sail, parachute, diving suit.

### C – Additional remarks related to socio-economic and environmentalt aspects

Textile production in Europe is carried out under the highest environmental standards! Encourage Textile industry to achieve further progress in developing innovative environmental technologies - bans only encourage manufacturing outside Europe and destroy an EU high-tech economy.

As the Federal Ministry for the Environment, Nature Conservation and Consumer Protection (BMU) states on its website (<u>www.bmu.de</u>) and analyses of the Federal Environmental Specimen Bank for some compounds show: The exposure of the population to PFOS (perfluorooctane sulphonic acid, C8) and PFOA (perfluorooctanoic acid, C8) has decreased significantly in recent decades. The exposures were highest in 1986. Today, they are around 10% to PFOS and around 30 % to PFOA compared to the levels at that time.

This tendency is mainly the result of the success of considerable investments by companies in the EU Member States (see further explanations). However, the information and trends in the dossier lead in a different direction and show an inappropriate level of burden, which we



cannot understand. Fundamental questions of emission sources would also have to be discussed. The main sources of emissions to the environment (e.g., through aerosols in teflon production, fire-fighting foams and/or fire training areas, production waste water, etc.) have already been largely eliminated, are largely minimized or eliminated by continuous technological development and dynamic operator obligations to comply with the state of the art in the EU (which is not necessarily the case in non-EU countries). The future release into the environment is therefore primarily limited to "abrasion" in products or extreme fire events where fluorinated fire-fighting foams must still be used for safety reasons. These issues must also be carefully weighed against the environmentally friendly side of the coin (e.g. ultrafiltration through membranes in waste water treatment technology).

We consider the emissions of PFHxA in the Restriction Dossier as overestimated. EURATEX made a model calculation of initial textile finishing PFHxA/RS emissions based on the input of perfluorinated C6-telomers:

EURATEX model calculation:

- Assumed annual EU consumption: 10.000t (10.000.000kg) used in the initial finishing of textiles in EU textile mills.
- REACH regulates the content of impurities like PFOA and associated substances with 1.000 ppb = 1 ppm, the same regulation is proposed for PFHxA/RS. Therefore, these amounts are chosen for the calculations ahead.
- So, the annual content of impurities is 10 kg/a in the EU.
- A worst-case recipe contains 200 g/L of fluorinated auxiliary agent (20%) which leads to 2 kg causing possible emissions.
- Assuming that 95% of the padding liquor remains on the fabric, as emissions during applications only occur if the padding liquor is diluted to the wastewater, then the emissions per year are 100 g in the EU.

With BAT technologies (as written in the new BREF/IED for the textile industry – at present on the stage of draft) this is reduced further towards zero PFHxA/RS immissions, by collecting the residual finishing liquids for reuse or incineration

#### Disposal situation - consider differentiated use scenarios - and disposal routes!

- **PPE:** PPE must have a long service life, quantities and charges are known to the user (employer). The latter has an obligation for these long service lives (until e.g., the warranty period has expired, sometimes up to 10 years). Special equipment is usually maintained, washed, and repaired by service providers in order to maintain the functionality of the textiles. In the PPE sector, systems for return, cleaning and disposal have already been established in Germany. Particularly in the PPE sector, the service life of the products is characterised by ensuring lasting functionality. Physical or chemical/biological contamination of the products is applicationrelated. If they are no longer functional, they must be removed from the material cycle due to contamination. In Germany, this is guaranteed by thermal recycling by the highest requirements. Very common in Germany are incineration temperatures at above 1000 °C, this disposal method is environmentally friendly, ecological and safe.
- Private Sector: In case of textiles used in the private sector (tents, tarpaulins, clothing, furniture), there are presently no legal requirements in Germany for collection and separation, but the situation will change due to revision of ther German Regulation. The Gesamtverband Textil und Mode e.V. (t+m) is presently working intensive for better traceability, sampling and disposal including recycling, preparation for reuse and waste



prevention. For individual products such as sleeping bags, for example, there is a greater focus on reuse (e.g., passing on sleeping bags or other outdoor items for charitable use). Here a patchwork of disposal channels is noticeable. There is no uniform explanation of how end consumers can recycle/dispose of their (textile) articles. Sometimes retailers or manufacturers offer repair or take-back services. Here the textile industry and its members will contribute to ensuring the transparency and disposal safety of the products.

## Socioeconomic impact: Risk of several tens of thousands jobs in the EU-textile industry and beyond is programmed

We refer to the EURATEX opinion on socio-economic impacts, which also includes the results of the survey of companies in the German textile industry. The impact on German companies would be worrying, several thousand jobs would be directly affected. The indirect effects on the entire value chain as well as the effects in case of a lack of protection for workers, safety and rescue forces would be many times higher. The same applies to a possible loss of safety, functionality and durability in the field of Technical Textiles, which can only be determined in connection with the respective components and applications.

In addition, determining the impact only on the socio-economic effects related to production only covers the top of the iceberg. The core idea of articles circulating in the circular economy is reusability.

The greater leverage and losses are generated in reprocessing, for which we give an example from the medical sector:

In Germany (basis for the 2020 observation), we can assume approximately 16.5 million surgeries/interventions, all of which will be performed covered

- of which approx. 8 million "serious" operations (OP set small to large, approx. 3.5 5 OP coats, additional items),
- of which approx. 8.5 million minor/outpatient operations and procedures (OP set small to medium, 0-2 surgical gowns, additional items),
- cost rate for 8 million "serious" operations: 20€ per operation
- cost rate for 8.5 minor/outpatient operations: approx. 8-10€ per operation, i.e., 9€.
- Market volume for "serious operations": 160 million p.a. in Germany
- Market volume for minor/outpatient operations: 76.5 million p.a. in Germany
- Total market volume for operations: 236.5 million p.a. in Germany

Reusable share of total volume: according to our surveys between 8% and 10%, we assume 10% for the calculation, i.e., **23.6 million p.a. in Germany.** 

This would simply be eliminated for reusable if companies were no longer allowed to work with PFHxA in known conditions. The substitutes would be much more highly qualified, much more expensive and would shoot companies out of the market this way.

#### Jobs:

Laundry jobs (laundries are the service providers that are considered to be manufacturers of medical products such as OP SETs/sleeves, since they market them as "fully refurbished" after each reprocessing):



- about 600-700 people directly affected by the product (production),
- about 300 people indirectly affected by the product (logistics, administration, procurement, sales, hospital services), i.e., a total of about 1,000 people currently work for this sector.

Further examples are given in the EURATEX statement.

Final remark: Proposed fluorine free only waterrepellent "alternatives"for textile Industry

During the RAC and SEAC -Consultation the PFHxA-restriction dossier submitter could not provide any toxicological data to fluorine free textile DWR products or receipes proposed as alternative to C6-flurinated auxiliaries.

According to our expertise the main components of fluorine-free DWR's for textiles contain:

- Modified DMP-Silicones: = containig **SVHC's like D4-D6** (already resticted or in progress for authorisation) and as well very persistent
- (Natural) Waxes = covered already in the ongoing **REACH Microplastic restriction**
- Fattyacid modified melamines (UBA REACH-restriction for Melamine in progress)
- Isocyanates = also in the focus of multiple **Reach-Regulations (e.g., OSH)**
- Crosslinkers = Blocked Isocyantes (Blocking agents like: Butanoxime = CMR, pyrazole = persistant etc.), or formol (CMR)

Therefore is already an ultimate risk that the "alternatives" to C6 will be banned also soon by other REACH, CLP-restrictions etc.

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The German textile and clothing industry is the second largest consumer goods industry in Germany with around 1 400 companies and more than 132 000 employees in Germany. German textile and fashion companies generate annual sales of around 32 billion euros (60 % of which are textiles, 40% of clothing) and are thus the leaders in Europe. Textile companies are important suppliers for industries such as automotive, aerospace, medicine, geotechnology etc. The overall association textil + mode (t+m) is the umbrella organization of the German textile and fashion industry. t+m represents the interests of the industry in the areas of economic, social, collective bargaining and education policy.

www.textil-mode.de