Implementation of the SUP Directive (2019/904)
Guidelines on single-use plastics products
Definition of plastics
Viscose and lyocell

Clarification of plastics definition for the uptake of cellulose fibres in Europe's bioeconomy

April 2020

The undersigned associations representing all the European actors in the textile, clothing and nonwovens sector and are committed to playing their role in promoting Europe's move towards a more sustainable and circular economy:

- **AISE**, the International Association for Soaps, Detergents and Maintenance Products
- **CEPI**, the European association representing the paper industry
- **CIRFS**, the representative body for the European man-made fibres industry and **IVC**, the association of the German, Austrian and Swiss man-made fibres industries
- **EDANA**, the voice of the nonwovens and related industries is actively contributing to the Commissions development of guidelines and implementing acts for the Single-Use Plastics Directive.
- **EURATEX**, the European textile and clothing confederation, has been actively working on circularity since 2017 and recently rolled out its Strategy with 38 concrete action proposals to boost circular economy in the textile and clothing value chain.

These industries have been transitioning towards more sustainable raw materials for certain products and applications that are renewable and based on natural resources, which are biodegradable under a range of environmental conditions.

The textile/clothing and nonwoven value chain have increasingly invested in natural and unmodified polymer "cellulose" such as viscose and lyocell fibres for specific applications. Scientific data[1] confirms these fibres biodegrade as well as cotton. Raw materials for viscose and lyocell cellulose fibres are sourced in Europe from mostly, if not all, FSC® and PEFC® certified and controlled forests and plantations. Typical uses of viscose and lyocell cellulose fibres include nonwoven-based health, hygiene and medical products, clothing and technical textiles.

Innovation in more sustainable products has well advanced but needs to be encouraged by clear and transparent, science-based legislation. Up to now, industry has made substantial efforts in cutting down innovation cycles in order to swiftly market more sustainable and biobased alternatives.

[1] e.g. M. Warnock, K. Davis, D. Wolf, E. Gbur, AATCC Rev. 2011, 11, 53.

Directive (EU) 2019/904 (SUPD)

The objectives of the Directive (EU) 2019/904 (on the reduction of the impact of certain plastic products on the environment) are to **"prevent and reduce the impact of certain plastic products on the environment,** in particular the aquatic environment, and on human health, as well as to promote the transition towards a circular economy with innovative and sustainable business models, products and materials, thus also contributing to the efficient functioning of the internal market".

The undersigned associations **have serious concerns that Commission guideline on single-use plastic products and thereunder clarifying the definition of plastics according to Article 12 of the SUP Directive (2019/904) could cover wood-based cellulose fibres in particular viscose and lyocell. This would hamper current and future investments in sustainable biobased materials, thereby counteracting the intentions of the SUP Directive and overlooking its contribution to Europe's bioeconomy.**

The guidelines on single-use plastic products should be consistent with existing legislation such as the food contact legislation, which regenerated cellulose viscose and lyocell as non-plastic material.

Viscose and Lyocell – investments in a sustainable bioeconomy

Domestic viscose and lyocell production sourced from sustainably managed forests in Europe is preventing carbon leakage. The Circular Economy Action plan recognises their key role:

"Biological resources are a key input to the economy of the EU and will play an even more important role in the future". The EU Commission also states that it will be "…supporting the sustainable and circular bio-based sector through the implementation of the Bioeconomy Action Plan" – of which these biobased fibres are part of.' An inclusion of these fibres in the definition of plastic may drive the industry towards a single solution that may not be appropriate for the diversity of applications and overall transition to circular economy. Scientific evidence demonstrates cotton production is limited (i.e. the so-called cotton gap) and not based in Europe. Evidence suggests the production of viscose and lyocell requires less amounts of land, water, fertilizers and crop protection than conventional cotton[2]. In the context of bioeconomy and circular economy, renewable natural resources, such as cellulose, have demonstrated environmental benefits[3].

[2] https://kth.instructure.com/files/93812/download?download_frd=1

[3] IMPRO Textiles 2014 : Beton, A., et al. (2014). Environmental Improvement Potential of Textiles (IMPRO-Textiles). JRC Scientific and Technical Reports. O. WOLF, M. CORDELLA, N. DODD and J. KOUGOULIS (eds.) , European Commission: 1-190.
https://susproc.jrc.ec.europa.eu/textiles/docs/120423%20IMPRO%20Textiles_Publication%20draft%20v1.pdf

Shen et al. 2010: Shen, L., E. Worrell, and M.K.Patel, (2010). "Environmental impact assessment of man-made cellulose fibres." Resources, Conservation and Recycling **55**(2): 260-274.

Business examples of recycling post- and pre-consumer textile waste to make regenerated cellulose fibres have been already rolled out, and other pilots are in early development, thereby strengthening the circularity of the entire value chain[4] [5]. Such efforts shall be supported and scaled up to deliver a successful EU Textile Strategy as of 2021.

Viscose and lyocell have the same chemical structure as cellulose and are not chemically modified

European legislation as well as technical expertise conclude that lyocell and viscose are not chemically modified natural polymers "cellulose" and should not be included in the definition of plastics. These are regenerated (man-made) cellulose fibres made of wood pulp, which undergo a dissolving process for spinning the fibres. After this process, these fibres have the same chemical structure as cellulose in wood and cotton.

The industry believes that there is a serious risk that upcoming guideline and its definition of plastics could preclude the potential of cellulose-based material in a sustainable European economy.

[4] See: https://cellulose-fibres.eu/press/?id=173
[5] See: http://www.circulary.eu/sectors/textiles-apparel-and-leather