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## Memo on national legislation and initiatives banning microplastics

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### Summary

This memo describes the national regulation and initiatives banning microbeads in nine countries. So far, (proposed) prohibition of microbeads is limited to rinse-off cosmetic products, such as cleaning and scrubbing agents, including toothpaste. Microbeads are generally defined as ‘solid plastic particles’ smaller than 5 mm in size. Five countries have notified the WTO of their proposed regulations as a technical standard falling under the WTO TBT Agreement.

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## EU Member States

### France

On 20 July 2016, the French Parliament adopted the Law for the recovery of biodiversity, nature and landscapes.<sup>1</sup> It sprung from a concern that we might be experiencing a mass extinction of the diversity of species, and aimed at remedying it by curbing the pollution of the environment. The law founded the French Agency for Biodiversity and it also banned a number of products from the market that constituted a source of pollution, such as microbeads, in Article 124.<sup>2</sup> Article 124 of the Law on Biodiversity added the following provision on microbeads to article L. 541-10-5 III of the French Environment Code:

On 1st January, 2018 at the latest, is ended the placement on the market of rinse-off cosmetic products for exfoliation or cleaning containing solid plastic particles, with the exception of particles of natural origin not liable to persist in the environment, release active chemical or biological ingredients thereinto, or affect animal food chains.<sup>3</sup>

France has notified the European Commission of its intended prohibition under the 2015/1535 notification procedure. This procedure examines technical regulations for products from EU member states whether the measures may conflict with EU regulation, in particular the free movement of goods and other related legislation.<sup>4</sup> France has justified the prohibition as a commitment under international law and the EU Marine Strategy Framework Directive.<sup>5</sup> The period for comments ended 13 January 2017. Via the EU procedure notification has also been made at the World Trade Organization (WTO).<sup>6</sup> Under the Agreement on Technical Barriers to Trade (TBT Agreement), regulation that sets technical standards to products has to

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<sup>1</sup> Loi n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages, TA n° 803, <<http://www.assemblee-nationale.fr/14/dossiers/biodiversite.asp>>.

<sup>2</sup> Loi n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages, TA n° 803, <<http://www.assemblee-nationale.fr/14/ta/ta0803.asp>>.

<sup>3</sup> Translation provided by Isaure Simonin, member of LAPP, based on documents of the EU.

<sup>4</sup> Council Directive of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (83/189/EEC) No L 109/8; see also <[https://ec.europa.eu/growth/single-market/barriers-to-trade/tris\\_en](https://ec.europa.eu/growth/single-market/barriers-to-trade/tris_en)>.

<sup>5</sup> Notification Detail, Decree prohibiting the placement on the market of rinse-off cosmetic products for exfoliation or cleaning that contain solid plastic particles, provided for in the third paragraph of point III of Article L541-10-5 of the Environmental Code, Notification number 2016/543/F, received on 12 October 2016, <[http://ec.europa.eu/growth/tools-databases/tris/en/search/?trisaction=search\\_detail&year=2016&num=543](http://ec.europa.eu/growth/tools-databases/tris/en/search/?trisaction=search_detail&year=2016&num=543)>.

<sup>6</sup> Notification of France of 30 November 2016, Committee on Technical Barriers to Trade, G/TBT/N/FRA/170 and G/TBT/N/FRA/170/Corr.1.

be notified.<sup>7</sup> Its recommended 60 days period of comments has passed (30 November 2016 - 29 January 2017) and it seems that no comments of the European Commission as well as of the WTO member states have been received. The subsequent Decree to make the necessary adjustment in the French Environment Code was taken on 8 March 2017.<sup>8</sup>

This ban is promising, yet it is limited to microbeads used in rinse-off cosmetic products. Microbeads are also found in other products such as household cleaning products on which the ban does not apply. Although the government has not announced that it wishes to extend the ban, NGOs such as the Surfrider Foundation Europe are already campaigning for a ban on microbeads in household cleaning products.

## **Sweden**

The Swedish Chemicals Agency (*Kemikalieinspektionen*, hereinafter KEMI) has taken a strong position against microbeads. In its report ‘Proposal for a national ban on plastic microbeads in cosmetic products’ (*Förslag till nationellt förbud mot mikrokorn av plast i kosmetiska produkter*) KEMI proposes a prohibition on the sale of rinse-off cosmetic products that contain plastic microbeads as of 1 January 2018.<sup>9</sup> Besides, it urges the Swedish government to promote a ban on EU level.

KEMI believes that a national ban is permitted under European law due to the fact that at this point, there is no rule prohibiting or limiting the use of microbeads under the REACH regulation and furthermore, because the Cosmetic Regulation does not protect the interests involved, since these are mainly environmental concerns and not reasons of human health.<sup>10</sup>

## **United Kingdom**

In September 2016, the UK Environment Secretary Leadsom, announced that the UK would draft legislation to ban the sale and manufacture of microbeads from the end of 2017.<sup>11</sup> The proposal is motivated by concerns that microbeads are harmful to marine environment which,

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<sup>7</sup> Article 10.6 of the Agreement on Technical Barriers to Trade, 1868 U.N.T.S. 120.

<sup>8</sup> Décret no 2017-291 du 6 mars 2017 relatif aux conditions de mise en œuvre de l’interdiction de mise sur le marché des produits cosmétiques rincés à usage d’exfoliation ou de nettoyage comportant des particules plastiques solides et des bâtonnets ouatés à usage domestique dont la tige est en plastique, <<https://www.legifrance.gouv.fr/eli/decret/2017/3/6/DEV1702157D/jo/texte>>.

<sup>9</sup> KEMI, *Förslag till nationellt förbud mot mikrokorn av plast i kosmetiska produkter* (Stockholm 2016) 8.

<sup>10</sup> *ibid* 9.

<sup>11</sup> Department of Environment, Food and Rural Affairs, “Government announces plans to ban microbeads in cosmetics and personal care products” (3 September 2016) <<https://www.gov.uk/government/news/microbead-ban-announced-to-protect-sealife> accessed 19 October 2016>.

in turn, adversely affects the food chain.<sup>12</sup> The scope of this proposed measure is somewhat limited as the prohibition will only affect ‘cosmetics and personal care products’, including ‘face scrubs, toothpastes and shower gels’.<sup>13</sup> Therefore, it seems like the United Kingdom is following the United States regarding the emphasis on the use of certain products instead of types of plastic.

A consultation will be held in late 2016 in order to establish the precise mechanics of the legislation. Following this consultation, details relating to the timeline of enactment and a more precise summary of measure will be released. In addition, the Department of Environment will investigate the environmental impact of microbeads in other substances, such as in cleaning products, in order to determine whether the microbeads ban should be extended. While the current proposal is a step in the right direction as both sale and manufacture will be prohibited, it is unfortunate that its scope is restricted to personal care products.

## **Non-EU Member states**

### **Australia**

The competence to regulate environmental matters lays with the Commonwealth, state and territory Environment ministers together. They meet regularly to review environmental regulation. In the Environment Ministers meeting of 27 February 2015, New South Wales and South Australia agreed ‘to lead work on a jurisdictional phase down of microbeads.’<sup>14</sup> New South Wales set up a Microplastics Working Group to formulate ‘the most effective response.’<sup>15</sup> A voluntary industry agreement was proposed to allow the industry to manage the impact of microbeads without the need for a regulatory approach.<sup>16</sup> Together with ACCORD, the national industry association representing manufacturers and suppliers of hygiene, cosmetics and specialty products, a voluntary agreement has been developed for rinse-off products with a phase out period of two years following commencement of the agreement, but not later than 1 July 2018.<sup>17</sup> In February 2016 Minister for Environment Hunt stated that if the voluntary phase-out procedure will not be proven effective enough, by 1 July

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<sup>12</sup> BBC News, ‘Plastic microbeads to be banned by 2017, UK government pledges’ *BBC News*, 3 September 2016) <<http://www.bbc.com/news/uk-37263087>>; Adam Vaughan, ‘UK government to ban microbeads from cosmetics by end of 2017’ *The Guardian* (London 2 September 2016).

<sup>13</sup> *ibid.*

<sup>14</sup> 27 February 2015 Meeting of Environment Ministers, Agreed Statement.

<sup>15</sup> NSW EPA, ‘Plastic microbeads in products and the environment’ (NWU EPA Sydney 2016) 2.

<sup>16</sup> *ibid.* 8.

<sup>17</sup> 15 December 2015 Meeting of Environment Ministers, Agreed Statement, 3.

2017, the Australian government will pursue a national ban on microbeads.<sup>18</sup> This was confirmed in even stricter terms by the Meeting of Environment Ministers of 25 November 2016, by highlighting that a ban should apply to all products containing microbeads, and should also apply to smaller manufacturers and importers.<sup>19</sup> Although no voluntary agreement has been published yet, it seems that the definition of products will be broader than in other national initiatives, as it should include cosmetic products which are ‘otherwise reasonably capable of reaching the environment after use or disposal.’<sup>20</sup>

## **Canada**

In March 2015, the House of Commons of Canada unanimously voted to include microbeads in the list of toxic substances under its Canadian Environmental Protection Act 1999 (CEPA 1999).<sup>21</sup> The procedure for amending the CEPA was started and in June 2016 the CEPA was amended.<sup>22</sup> The order adds under 133 ‘Plastic microbeads that are  $\leq 5$  mm in size’ in Schedule 1 of the CEPA. The CEPA is part of federal environmental legislation aimed at preventing pollution and protecting the environment and human health. One of its main objectives is to regulate toxic and harmful substances, including the introduction of new substances. Similar to the REACH Regulation the CEPA regulates research and monitoring, risk assessment and management, and compliance and enforcement. A substance will be assessed and categorized. Section 64 of the CEPA 1999 defines a substance as toxic ‘if it is entering or may enter the environment in a quantity or concentration or under conditions that:

1. have or may have an immediate or long-term harmful effect on the environment or its biological diversity;
2. constitute or may constitute a danger to the environment on which life depends; or
3. constitute or may constitute a danger in Canada to human life or health.<sup>23</sup>

Schedule 1 provides the list with toxic substances that can be regulated with subsequent regulation. The Department of the Environment has concluded on the basis of scientific

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<sup>18</sup> The Hon. Greg Hunt MP Minister for the Environment, ‘Federal Government strengthens efforts to tackle plastic waste’ (Media Release 29 February 2016).

<sup>19</sup> 25 November 2016 Meeting of Environment Ministers, Agreed Statement, 3.

<sup>20</sup> NSW EPA, ‘Plastic microbeads in products and the environment’ (NWU EPA Sydney 2016) 9. The document specifically mentions ‘sunscreens’.

<sup>21</sup> Order Adding a Toxic Substance to Schedule 1 to the Canadian Environmental Protection Act, 1999, Canada Gazette, Part I: Vol. 149, No. 31 - August 1, 2015.

<sup>22</sup> Order Adding a Toxic Substance to Schedule 1 to the Canadian Environmental Protection Act, 1999, Canada Gazette, Part II: Vol. 150, No. 13 June 29, 2016

<sup>23</sup> Section 64 of CEPA 1999.

review and consultation with experts that microbeads should be considered toxic to the environment and therefore be listed in Schedule 1, which was executed in June 2106. The government of Canada has now proposed subsequent regulation with regard to exfoliating and cleansing toiletries, the Microbeads in Toiletries Regulations.<sup>24</sup> The proposal defines toiletries as ‘any personal hair, skin, teeth or mouth care products for cleansing or hygiene, including exfoliants and any of those products that is also a natural health product as defined in the Natural Health Products Regulations or a non-prescription drug.’ The proposal excludes prescription drugs. Manufacturing those products with microbeads is prohibited from 1 January 2018, while the sale is prohibited from 1 July 2018. The prohibition of microbeads in natural health products and non-prescription drugs follow six months later.<sup>25</sup> The proposed regulation is now pre-published for a period of 75 days, after which it will be ‘made’ in the form of an executive order.<sup>26</sup>

## **China**

In 2015, Chinese researchers carried out a study on microplastics in commercially sold sea salt. They took 15 brands of sea salts, lake salts and rock/well salts from supermarkets throughout China. In sea salts 550 to 681 particles per kg were found, while in lake salts and rock/well salts much less particles were found, although still up to 364 respectively 204 particles per kg.<sup>27</sup>

In another study carried out in 2015, researchers found very high levels of microplastics in Taihu Lake, the third largest lake in China, located in a high developed area in the Jiangsu province. These high levels were also found in the organisms of Taihu Lake, such as the widespread Asian clam and plankton. The micro plastic levels measured in plankton net samples collected were the highest found in freshwater lakes worldwide, according to the researchers.<sup>28</sup>

These studies have raised awareness on microplastics in the China and several NGOs have payed attention to microplastics in cosmetic products. Eco Canton, a non-profit

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<sup>24</sup> Proposed regulations Microbeads in Toiletries Regulations, Canada Gazette, Part 1: Vol. 150, No. 45 November 5, 2016. Similar measures were earlier announced as ‘Proposed Regulations for Microbeads in Personal Care Products Used to Exfoliate or Cleanse’.

<sup>25</sup> *ibid.*

<sup>26</sup> Government of Canada, *Guide to Making Federal Acts and Regulations* (2nd edn, 2001) 186.

<sup>27</sup> Yang Dongqi, Shi Huahong, Li Lan, Li Jiana, Khalida Jabeen and Prabhu Kolandhasamy. ‘Microplastic Pollution in Table Salts from China’ (2015) 49 no. 22 *Environmental Science & Technology* 13622-7; See also <https://www.scientificamerican.com/article/plastic-contaminates-table-salt-in-china/>.

<sup>28</sup> Su Lei, Xue Yingang, Li Lingyun, Yang Dongqi, Prabhu Kolandhasamy, Li Daoji and Shi Huahong, ‘Microplastics in Taihu Lake, China’ (2016) 216 *Environmental Pollution* 711-719.

environmental organization in Guangzhou, organized a survey among high school students in Guangzhou in particular about microplastics in cleaning and shower gel products. Several activities are under process in order to raise civil recognition and put an end to cosmetics containing micro plastics. However, no governmental action regarding microplastics in cosmetic products has been taken so far.

## South Korea

South Korea has an active civil society, which had led to the proposal for legislation of the banning of microbeads. Greenpeace Korea and the Korea Women's Environmental Network (KWEN) are the two major actors in the lobbying process. Both demanded the government set up regulations to ban microbeads.<sup>29</sup>

Political institutions are also involved in the issue. The Ministry of Oceans and Fisheries seems to have started a study to find out how small plastic particles will specifically affect marine life.<sup>30</sup> The Korea Environmental Institute made a report in 2014 which recognized the harmful effect of microbeads for the marine ecology and human health.<sup>31</sup>

South Korea is planning to ban the use of microbeads in cosmetics in 2017. The Ministry of Food and Drug Safety (MFDS) has proposed to prohibit the sales of products containing them from July 2017.<sup>32</sup> From July 2018, the rules will also ban the sale of previously manufactured cosmetics that contain microplastics.<sup>33</sup> The ban has been notified to the WTO TBT Committee on 26 January 2016.<sup>34</sup>

In April 2016, a group of cosmetic companies made a voluntary move, announcing a phase-out plan that they will stop using microbeads in their products by July 2017. Renowned cosmetics companies such as L'Oreal, The Bodyshop and Avon have pledged to stay microbeads-free.<sup>35</sup>

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<sup>29</sup> Kim Se-jeong, 'NGOs push gov't to ban microbeads', *The Korea Times*, 7 September 2016, <[http://www.koreatimes.co.kr/www/news/nation/2016/09/117\\_213663.html](http://www.koreatimes.co.kr/www/news/nation/2016/09/117_213663.html)>.

<sup>30</sup> 'Cosmetics microbeads threaten sea life', *The Korea Herald*, 24 July 2016 <<http://www.koreaherald.com/view.php?ud=20160724000333>>.

<sup>31</sup> Kim Se-jeong, 'NGOs push gov't to ban microbeads', *The Korea Times*, 7 September 2016, <[http://www.koreatimes.co.kr/www/news/nation/2016/09/117\\_213663.html](http://www.koreatimes.co.kr/www/news/nation/2016/09/117_213663.html)>.

<sup>32</sup> South Korea proposing microbeads ban in cosmetics. (n.d.). Retrieved December 12, 2016, from <https://chemicalwatch.com/50267/south-korea-proposing-microbeads-ban-in-cosmetics>

<sup>33</sup> 'Rare occurrence as environmental groups applaud gov't restriction on microplastic', *The Hankyoreh* 30 September 2016, <[http://english.hani.co.kr/arti/english\\_edition/e\\_national/763613.html](http://english.hani.co.kr/arti/english_edition/e_national/763613.html)>.

<sup>34</sup> Notification of Korea of 1 February 2016, Committee on Technical Barriers to Trade, G/TBT/N/TPKM/249G/TBT/N/KOR/706.

<sup>35</sup> 'Cosmetics microbeads threaten sea life', *The Korea Herald*, 24 July 2016 <<http://www.koreaherald.com/view.php?ud=20160724000333>>.

## Taiwan

Taiwan is the first region in Asia dealing with the prohibition of microbeads. A campaign of Greenpeace East Asia raised awareness and revealed that many companies, despite promises, still used microplastics in their products.<sup>36</sup> In 2016, the Taiwanese government by its Environmental Protection Administration (EPA) prepared a proposal to restrict the manufacture, importation and sale of cosmetics with microbeads under its Waste Disposal Act.<sup>37</sup> It was foreseen to put an end to manufacturing and importing cosmetics and cleaning products with microbeads by 1 July 2018, and to selling by 1 January 2020. Environmental organizations were urging the government to put forward the deadline to 2018. On 8 December 2016, after public consultation, the government announced that indeed the dates were advanced while referring to the regulation of the US, Canada, France and South-Korea, prohibiting manufacturing and importing of cosmetics with microbeads from 1 January 2018, and selling from 1 July 2018.<sup>38</sup> The proposed regulation follows the methods of the US Microbead-Free Waters Act of 2015, using the same definitions. Microbeads are defined as ‘solid plastic particles used for exfoliation or cleaning of the body wherein the scope of particles diameter is smaller than 5 mm and the materials of which they are made includes biodegradable plastic.’<sup>39</sup> The prohibition is applicable to personal care products which are defined as ‘products used for cleaning one’s body, and which must be cleaned off or rinsed off with water after use’, facial scrubs, and toothpaste.<sup>40</sup> The regulation has been notified to the WTO for complying with the notification procedure under the TBT Agreement.<sup>41</sup>

## United States

In December 2015, the United States Congress adopted an amendment to the Federal Food, Drug, and Cosmetic Act in which it forbids the manufacture, the introduction or delivery of cosmetic products into interstate commerce of a rinse-off cosmetic that contains

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<sup>36</sup> Taehyun Park, ‘From L’Oréal to Revlon, which brands are polluting the ocean with microbeads?’ Blogpost 21 July 2016 *Greenpeace East Asia* <<http://www.greenpeace.org/eastasia/news/blog/from-loral-to-revlon-which-brands-are-polluti/blog/57085/>>.

<sup>37</sup> Restrictions on the Manufacture, Import, and Sale of Personal Care and Cosmetics Products Containing Plastic Microbeads, Environmental Protection Department, <<http://enews.epa.gov.tw/enews/factNewsdetail.asp?InputTime=1051208144141>>; see also <<http://www.ilovetdsa.org.tw/TDSA/1050829.pdf>>.

<sup>38</sup> Draft of the Restrictions on the Manufacture, Import, and Sale of Personal Care and Cosmetics Products Containing Plastic Microbeads, Public Announcement, attachment to G/TBT/N/TPKM/249/Add.1, Notification of The Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, 23 January 2017, <[https://members.wto.org/crnattachments/2016/TBT/TPKM/16\\_4322\\_00\\_e.pdf](https://members.wto.org/crnattachments/2016/TBT/TPKM/16_4322_00_e.pdf)>.

<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.*

<sup>41</sup> Notification of The Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu of 14 October 2016, Committee on Technical Barriers to Trade, G/TBT/N/TPKM/249.



intentionally-added plastic microbeads.<sup>42</sup> This amendment is called the Microbead-Free Waters Act of 2015 (henceforth: the Act). Section two of the Act defines microbeads as ‘any solid plastic particle that is less than five millimetres in size and is intended to be used to exfoliate or cleanse the human body or any part thereof.’<sup>43</sup> The definition includes also toothpaste.<sup>44</sup> The definition of the term microbeads makes clear that neither type nor level of toxicity of plastics is important for this Act to be enforced. For the Act to be applicable only size and purpose of the particles/products matter. Furthermore, those particles need to be intentionally added.

The Act provides a ‘phase-out time’. From 1 July 2017 manufacturing rinse-off cosmetics with microbeads is prohibited, while the introduction and delivery on the interstate market will be prohibited from 1 July 2018.<sup>45</sup> The Act makes a difference between common rinse-off cosmetic products and rinse-off products that are a non-prescriptive drug, otherwise known as ‘over-the-counter-drugs.’ Examples include common like products like hand washes, facemasks and toothpaste. Non-prescriptive drugs have a one year longer adjustment time for both manufacturing and introduction. When the prohibitions enter into force, states are not allowed to set lesser or further restrictions on microbeads for the same category of cosmetics.<sup>46</sup>

The present overview of countries that have legislation in place or have proposed a ban is not complete. New Zealand has notified the WTO TBT Committee of a proposal to ban microbeads in personal care products in March 2017.<sup>47</sup> Further study has to be done to give a more complete overview.

### **WTO notifications under the TBT Agreement**

Since October 2016, five countries have notified the WTO TBT Committee of their proposed bans on microbeads in rinse-off cosmetics. The WTO TBT Committee was set up by the Agreement on Technical Barriers to Trade to monitor measures that set standards to product for public policy reasons, such as human health, environment, consumer information and quality. These measures are allowed under the TBT Agreement only if they are non-

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<sup>42</sup> Sec. 2 (a) Microbead-Free Waters Act of 2015.

<sup>43</sup> Sec. 2 (a) Microbead-Free Waters Act of 2015.

<sup>44</sup> Sec. 2 (a) Microbead-Free Waters Act of 2015.

<sup>45</sup> Sec. 2 (b) Microbead-Free Waters Act of 2015.

<sup>46</sup> Sec. 2 (b) Microbead-Free Waters Act of 2015.

<sup>47</sup> Notification of New Zealand of 18 March 2017, Committee on Technical Barriers to Trade G/TBT/N/NZL/77.

discriminatory and do not create an ‘unnecessary obstacles to international trade.’<sup>48</sup> Technical standards should follow international standards as much as possible, but if these are not available states may set their own standards. Countries should notify the other WTO Members via the Secretariat of proposed measures and provide a reasonable time for reactions and comments.

On 6 October 2016, South Korea was the first country to notify its proposed prohibition of microbeads and thereafter Taiwan, Canada, France and New Zealand have followed. No comments of other countries have been received, but it may be too early to draw any conclusions.

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<sup>48</sup> TBT Agreement, Article 2.