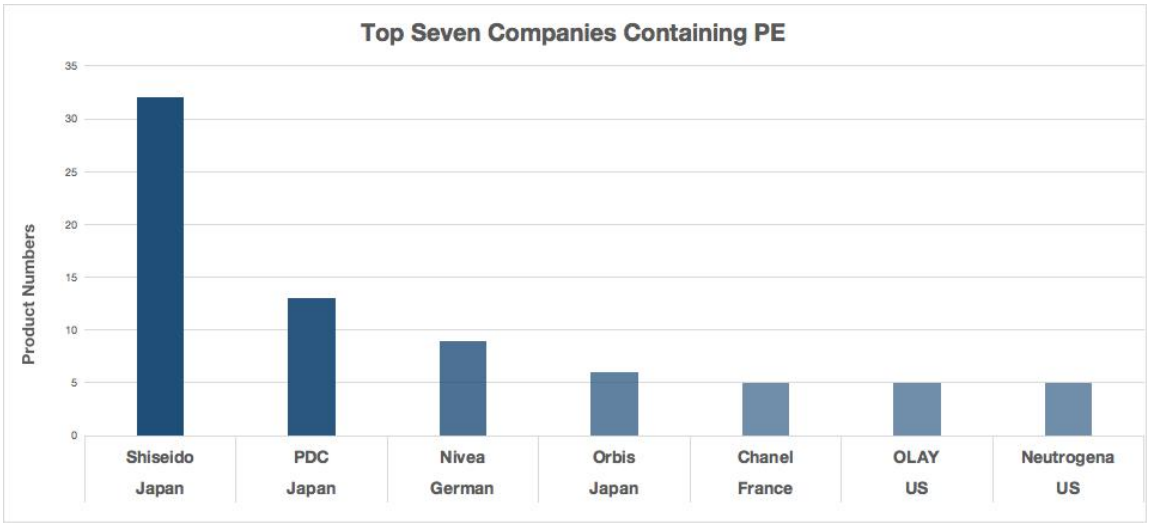
126 Companies Found Producing Facial Cleansers with Microplastic

“You can’t stop this trend unless companies cease producing related materials”, Hao Wu, a marine biologist from Fujian Institution of Oceanography (FJIO), repudiated the likelihood of avoiding threats from microplastic contamination.

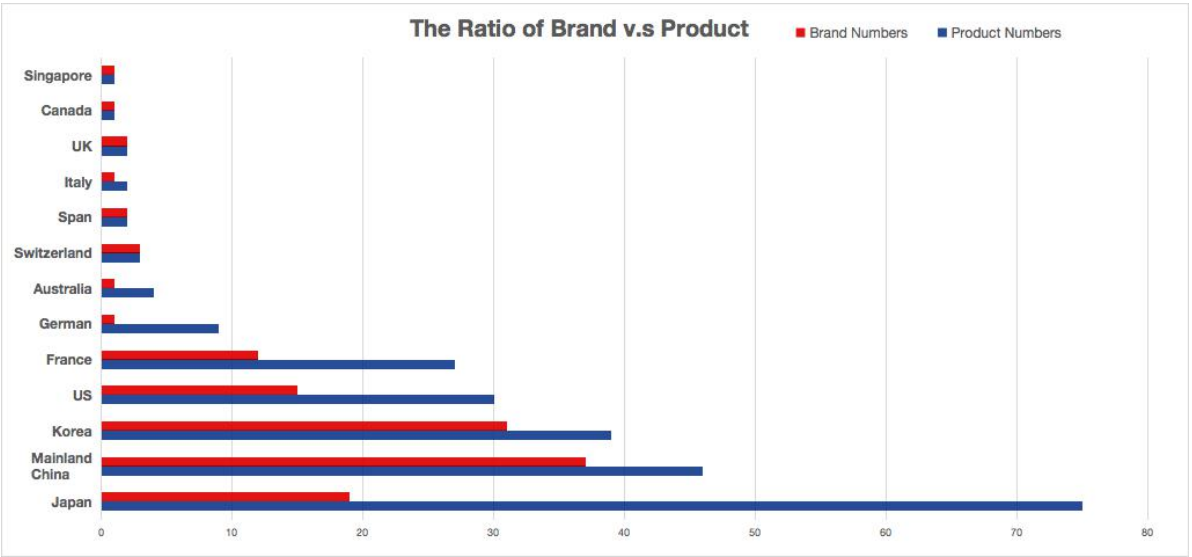
126 companies, including Chanel, Estee Lauder, Nivea, and Neutrogena, are found of producing facial cleansers containing “polyethylene”(PE). There are 12 countries with 241 products involved, including France where the sale of facial cleansers with microplastic are banned. The data was scraped from bevol.cn, an information provider monitoring the Chinese cosmetic market.

Source: bevol.cn, Scraped and edited by Lin Su



Source: bevol.cn, Scraped and edited by Lin Su

Japan, China, Korea, the US, and France are listed the top five countries in this sort of production. In ratio, many Koran and Chinese brands are facing the problem of containing PE while fewer Japanese, Germany and American brands contribute to a major part of their countries' product lists.



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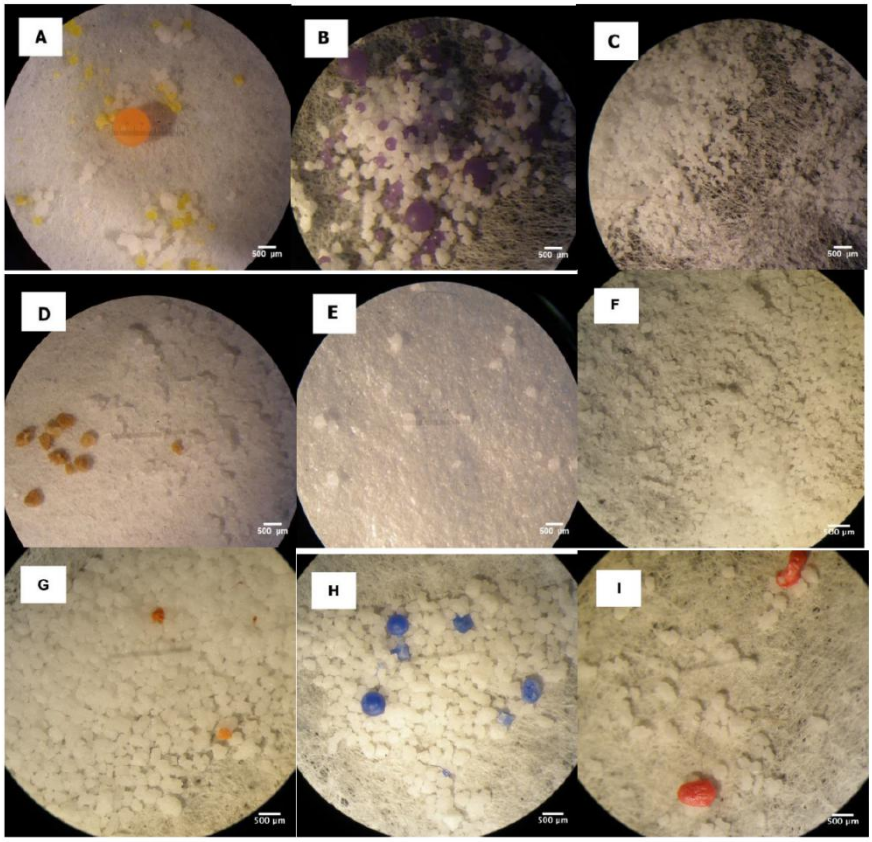
Bevol.cn stated on its website that PE, one major component of plastic, can serve as film-forming agent, different from the easily recognized microbeads. However, it is confirmed by research scientists from FJIO that as long as the diameter of the plastic is below 5 millimeters, it can be taken as "microplastic".

Nine products from three popular brands among the US market, namely Clean & Clear, L'Oreal and Neutrogena, were observed by Michelle Chang, a chemist in the University of California Berkeley with several young scientist awards.



Photomicrographs of the microplastics and colored inclusions in facial cleanser products.
Source: Michelle Chang, 2013

“The beads ranged from 60-800∓m in diameter, with a 264∓m overall mean”, she wrote in her research paper, meaning that the size of microplastic is way smaller than standard- 5 millimeters (5000∓m).

A small-scale study on human participants in October this year was reported by *the Guardian* and marked the first time of microplastic being found in human waste. Apart from human beings, this tiny material is penetrating in every corner of the environment, from turtles to seabirds, from sea salt to bottled waters. “You can find it in the water, the sediments, and also the bodies of creatures”, Wu added.

Even scientist like Wu is not confident about tracking down the amount. “First, it is impossible for you to track your food back to its source. Also, human beings are standing at the top of the food chain.”

Chang worked on the other side of the pond. Based on an online survey of 175 individuals, she estimated that 6259 residents at UC Berkeley were contributing a total 5000 grams of microplastic into waste stream, equal to the weight of about 500 Target’s plastic bags.

Due to its high hydrophobicity, the microplastic in the ocean attracts other highly hydrophobic pollutants, through which concentrations of mass pollution thus happen. This is also true for human bodies. “It can’t be noticed in short time. This is also a process of concentration”, Wu explained.

“Large plastic is decomposed into smaller ones in the environment,” explaining by Dr. Siguang Liu from the College of Environment and Ecology from Xiamen University, “it is easier for us to clean up plastic pieces. But for microplastic coming directly from household sewer system, that is really tricky.”