



WOMEN'S VOICES FOR THE EARTH

OUR HEALTH. OUR FUTURE. TOXIC FREE.

November 30, 2020

To the CIR,

While I have previously brought concerns to the CIR regarding the inhalation safety of certain ingredients used in airbrush makeup, I realize that it has been a while since I wrote those comments and there are new members of the Expert Panel who would not have seen them.

In order to put my submitted comments of June 2, 2020 into context, I aim to bring to the CIR's attention the fact that methicones are a common ingredient used in airbrush makeup (foundations, blushes, etc.) As mentioned in my previous comments on the Aerosols boilerplate, airbrush makeup is a form of makeup delivered in an exceptionally fine mist directly to the face. Application of airbrush makeup (which can involve multiple applications of various layers) can take 5-10 minutes (or longer) of essentially continuous spraying to the face.) To get a better visual idea of what airbrush makeup entails, here are two links to YouTube video tutorials:

<https://www.youtube.com/watch?v=yBPry8aJ3oY>

<https://www.youtube.com/watch?v=5CfarFRHtto> (This video shows airbrush application to the eye area as well.)

When I initially brought these concerns to the CIR, there was no available modeling of the particle size generated by airbrush makeup guns. However, the new research, Pearce et. al.¹ does exactly that – measures the particle sizes emitted from an airbrush makeup gun, when directed at a mannequin head. The paper found that a considerable fraction of the particle sizes were significantly smaller than 10 microns, and thus present the potential to be deeply inhaled into the lungs. This data contradicts the statements in the Discussion section of the Methicones assessment which currently read:

“Also, the Panel noted that in aerosol products, 95% – 99% of droplets/particles would not be respirable to any appreciable amount.”

and

“Coupled with the small actual exposure in the breathing zone and the concentrations at which the ingredient is used, the available information indicates that incidental inhalation would not be a significant route of exposure that might lead to local respiratory or systemic effects.”

With airbrush makeup application, it is not true that 95-99% of droplets/particles would not be respirable, but rather a much larger percentage which would be of concern. Similarly, with airbrush makeup, 5-10 minutes (or longer) of continuous spray application to the face should not be considered a “*small actual exposure in the breathing zone*”, but could in fact be a significant route of exposure.

¹ Pearce K, Goldsmith WT, Greenwald R, Yang C, Mainelis G, Wright C. Characterization of an aerosol generation system to assess inhalation risks of aerosolized nano-enabled consumer products. *Inhal Toxicol.* 2019;31(9-10):357-367. doi:10.1080/08958378.2019.1685613

I hope the Expert Panel can include a specific discussion of the safety of methicones in airbrush makeup in the assessment.

Thanks very much for your consideration of these comments.

A handwritten signature in black ink on a light gray background. The signature is written in a cursive style and reads "Alexandra Scranton".

Alexandra Scranton
Director of Science and Research
Women's Voices for the Earth