



Synthetic Amorphous Silica  
and Silicate Industry Association

Cosmetic Ingredient Review  
1620 L St. N. W. Suite 1200  
Washington D. C. 20036

August 15, 2019

Dr. Bart Heldreth, Ph.D., Executive Director, CIR

Comments from the  
Synthetic Amorphous Silica and Silicate Industry Association  
To  
Cosmetic Ingredient Review  
Dr. Bart Heldreth, Director and the Expert Panel  
on  
Post Meeting Announcement

Cosmetic Ingredient Review Expert Panel 151st Meeting (June 6-7, 2019) - Findings

June 12, 2019

and

Amended Safety Assessment of Silica and Synthetically-Manufactured Silicates  
as Used in Cosmetics: June 19, 2019 Tentative Amended Report for Public Comment

Dear Dr. Heldreth,

In response to the Expert Panel's June 12, 2019 issuance of the "Post Meeting Announcement: Cosmetic Ingredient Review Expert Panel 151st Meeting (June 6-7, 2019) – Findings" and the June 19, 2019 issuance of the "Amended Safety Assessment of Silica and Synthetically-Manufactured Silicates as Used in Cosmetics: June 19, 2019 Tentative Amended Report for Public Comment", the members of the Synthetic Amorphous Silica and Silicate Industry Association (SASSI) would like to take this opportunity to advise the CIR Expert Panel on our intention to provide data a several of the silicate ingredients listed in the "Insufficient Data" category.

First, we would like to disclose that not all SASSI member companies manufacture silicates, and of the ones that do, only a few of those silicates are marketed for use in cosmetics. SASSI members manufacture aluminum silicate, calcium silicate, magnesium silicate, sodium magnesium aluminum silicate, sodium metasilicate and sodium silicate. However, only calcium silicate, sodium metasilicate and sodium silicate are marketed to the cosmetic industry.

Second, although we intend to supply the data requested by the Expert Panel we are not able to provide data on all of these materials at this time. However, we do expect to have the

remaining information compiled by the September Expert Panel meeting, hopefully sooner.

Table I (attached) lists the information we have collected to date.

I will forward any additional data as expeditiously as possible.

We are open to discussing any opportunity to assist CIR in completing a comprehensive and accurate review of synthetic amorphous silica and silicate ingredients. Please contact me to determine how we can support the efforts of your organization.

We look forward to your response.

Sincerely yours,

A handwritten signature in cursive script that reads "David A. Pavlich". The signature is written in dark ink and is positioned below the typed name.

David A. Pavlich  
Association Manager  
Synthetic Amorphous Silica and Silicate Industry  
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TABLE I

Chemical Name	Form	Typical particle Size	Crystallinity	Manufacturing route	Other comment
Calcium Silicate	powder solid	2-30 micron	<0.2%	reaction of sodium silicate and a calcium source in solution. The suspension received from reaction is filtered and the calcium silicate is further washed and dried.	Purity typically in accordance with JEFCFA specification ; not specifically marketed for cosmetics use.
Magnesium Silicate	Powder solid	3-20 micron (some grades are larger)	<0.2%	reaction of sodium silicate and a magnesium source in solution. The suspension received from the reaction is filtered and the magnesium silicate is further washed and dried.	Purity typically in accordance with JEFCFA specification ; not specifically marketed for cosmetics use.
Sodium Silicate (hydrous)	Powder or granules	80-700 micron	<0.1%	reaction of sand and sodium carbonate at high temperature, reaction is dissolved, filtered and spray dried to make powder	Impurities originate in the raw materials. Typical total impurity levels are less than 500 ppm
Sodium Silicate	Liquid	Liquid	<0.1%	reaction of sand and sodium carbonate at high temperature, reaction is dissolved, filtered and sold as liquid	Impurities originate in the raw materials. Typical total impurity levels are less than 500 ppm
Potassium Silicate	Liquid	Liquid	<0.1%	reaction of sand and potassium carbonate, reaction is dissolved, filtered and sold as liquid	Impurities originate in the raw materials. Typical total impurity levels are less than 500 ppm
Sodium Metasilicate	Powder	212 - 850 microns	<0.1%	Sodium metasilicate is made by adding caustic soda to liquid sodium silicate to obtain an equal molar ratio of sodium oxide (Na <sub>2</sub> O) to silicon dioxide (SiO <sub>2</sub> ). The resulting metasilicate liquor is then cooled to crystallize the pentahydrate product or passed through a dryer to remove water and yield the anhydrous product	Impurities originate in the raw materials. Typical total impurity levels are less than 500 ppm