



March 30, 2016

**IMPORTANT DIFFERENCES BETWEEN “CRYSTALLINE SILICA” AND
“SYNTHETIC AMORPHOUS SILICA”**

**Clarification that
OSHA’s New Respirable Crystalline Silica Rule
Does Not Apply to Synthetic Amorphous Silica**

RE: DEPARTMENT OF LABOR/Occupational Safety and Health Administration
29 CFR Parts 1910, 1915, and 1926
[Docket No. OSHA 2010-0034] RIN 1218-AB70
Occupational Exposure to Respirable Crystalline Silica
Final rule

OSHA has promulgated a final rule on “Occupational Exposure to Respirable Crystalline Silica.” Workers and consumers must be made aware of the significant and fundamental differences in health effects between “crystalline silica” (especially “respirable crystalline silica”) and “synthetic amorphous silica” (SAS). This distinction is important given that many industrial and consumer products may list the generic term “silica” as a component when, in fact, they contain SAS. SAS does not pose the health effect risks associated with “crystalline silica.”

The Synthetic Amorphous Silica and Silicate Industry Association (SASSI) is a 501 (c)(6) non-profit organization, incorporated on July 18, 2007, by eight founding members. SASSI’s mission includes furthering the understanding of synthetic amorphous silica and silicate health and safety data, communicating the results of said scientific data, monitoring the regulation of synthetic amorphous silica and silicate by government, educating the public and government on the views of the industry, and consulting and cooperating with officials and agencies on matters having an industry-wide significance.

OSHA has determined that employees exposed to respirable crystalline silica at the previous permissible exposure limits face a significant risk of material impairment to their health, and on March 25, 2016, promulgated the above-referenced final rule. The new rule, which is 1,772 pages long in its pre-publication format, specifically, repeatedly and consistently refers to “respirable crystalline silica” as the substance of concern.

SASSI member companies manufacture SAS products. Because SAS is not equivalent to “respirable crystalline silica,” it is important to emphasize this distinction and to confirm that the above-referenced OSHA rule is not applicable to SAS manufacturing processes, final products, or its end uses.

The health effects of SAS have been reviewed in recent years, and the available data on worker populations and animal studies support the conclusion that these substances are non-toxic. [Ref: Morfeld, P. et al. 2014. *Cross-sectional study on respiratory morbidity in workers after exposure to synthetic amorphous silica at five German production plants: exposure assessment and exposure estimates*. J. Occup. Environ. Med. 2014 Jan, 56(1); 72-78; and, Taeger D, McCunney R, Bailer U, Barthel K, Küpper U, Brüning T, Morfeld P, Merget R. *Cross-sectional study on nonmalignant respiratory morbidity due to exposure to synthetic amorphous silica*. J. Occup. Environ. Med. 2016 (in press)].

Industrial hygiene practices regarding the control and handling of SAS are grounded in over 60 years of manufacture and use. Safe industrial hygiene practices of SAS control and handling are in place to ensure that SAS exposure levels meet regulatory and occupational standards.

Overall, it is SASSI’s conclusion that, based upon available scientific studies, SAS products do not pose any unique toxicity and present little (if any) health risk when handled properly.

SASSI member companies include Evonik Corporation, J.M. Huber Corporation, Wacker Chemical Corp., PQ Corp., Cabot Corp., Solvay, Inc., W.R. Grace & Co.-Conn., and PPG. (www.sassiassociation.org)

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