Synthetic Amorphous Silica
and Silicate Industry Association

July 29, 2011

Comments from the
Synthetic Amorphous Silica and Silicate Industry Association
To
ACGIH on NIC on TLV of Calcium Silicate

The Synthetic Amorphous Silica and Silicate Industry Association (SASSI) is a national trade association. Key tenets of SASSI's mission focus on furthering the understanding of synthetic amorphous silica and silicate health and safety data within the industry, 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.

Consistent with our mission, and on behalf of our members, SASSI submits the following, additional comments to the Threshold Limit Values for Chemical Substances Committee for its upcoming review of Calcium silicate.

A. Executive Summary:

It is important to reiterate that not all Calcium silicates are the same. Analogous to Silicon dioxide, Calcium silicates exist in both crystalline/fibrous and non-crystalline (amorphous, non-fibrous) forms. This distinction between crystalline and amorphous forms of Silicon dioxide (silica) could not be greater. On the one hand, the crystalline form causes serious pulmonary fibrosis when inhaled and is listed as an IARC carcinogen. Amorphous silica on the other hand, although it has the identical chemical constituents, due to its non-crystalline morphology, has a very benign toxicology profile.

Based on reasonable comparisons, non-crystalline Calcium silicates needs to be viewed as a different moiety from the crystalline or fibrous form and thereby regulated in a less stringent manner. The bulk of our toxicology work has been performed on amorphous silica, but the structural similarity to Calcium silicate and the occupational health experience supports this important correlation.

We agree with the Committee's "refined review" which now considers Calcium silicate, naturally occurring as wollastonite and Calcium silicate, synthetic non-fibrous forms as separate and distinct materials.

B. List of Recommendations:

SASSI recommends maintaining the current TLV for Calcium Silicate, synthetic non-fibrous at 10 mg/m3 (inhalable).

C. Rationale:

SASSI was notified in a July 20, 2011 letter from ACGIH that "…the Committee has refined their review of Calciium silicate to include Calcium silicate, naturally occurring as wollastonite and Calcium silicate, synthetic nonfibrous forms." We appreciate that the Committee has addressed a number of the points SASSI made in its July 29, 2010 comments to ACGIH, and we would refer the Committee to those comments (and the references provided) as they consider the basis for revising the TLV for Calcium silicate, synthetic non-fibrous.

D. Citable Material:

At this time, SASSI has no additional reference materials. However, we would respectfully refer the Committee to the SASSI comment letter submitted to ACGIH on July 29, 2010 for relevant references.

We appreciate the Committee's consideration of SASSI's comments and concerns. We are open to meeting with you and discussing any opportunity to assist ACGIH in completing a comprehensive and accurate review of synthetic calcium silicate. Please contact me to determine how we can support the efforts of your organization.

Sincerely yours,

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

SASSI Member Companies:

- J.M. Huber Corporation
- Evonik Degussa Corporation
- Wacker Chemical Corp.
- Cabot Corporation
- Rhodia Inc.
- PPG Industries, Inc.
- PQ Corp.
- W.R. Grace & Co.

SASSI Website: www.sassiassociation.org