

Safety Alert for Methyl Hydrogen Polysiloxanes

May 2003

In keeping with the product stewardship commitment of its members, the Silicones Environmental, Health and Safety Council of North America (SEHSC), an organization representing silicones manufacturers in North America, is issuing this safety alert to help inform users of silicones products of the possible hazardous characteristics of certain products.

Many silicones are reactive in nature and care is required when handling these materials. One such class of silicones, which is reactive under certain conditions, is methyl hydrogen polysiloxanes (SiH)¹. These materials come in many forms, such as emulsions, fluids, and resins. When stored, handled and used in accordance with the appropriate guidance provided on their respective Material Safety Data Sheets (MSDS), SiH-containing products can be used safely. There are, however, two potential hazard scenarios we would like to bring to your attention:

- SiH products (e.g., SiH fluids and emulsions) may evolve hydrogen on contact with strong acids or bases; amines; primary alcohols and water in the presence of acids, bases or catalytic metals; some catalytic and reactive metals; or metal salt forming compounds. When contacting these materials, SiH compounds can rapidly evolve hydrogen gas and form **flammable and explosive** mixtures in air. Please contact your supplier or see your supplier's MSDS for information on the safe handling, storage and use of these products.
- SiH products used in platinum-catalyzed addition-curing systems, such as SiH elastomers, can also release **flammable and explosive** hydrogen gas if these products are combined with incompatible materials. Again, please contact supplier or see your supplier's MSDS for information on the safe handling, storage and use of these products.

Please share this information with parties who use or handle these materials. If you distribute these types of materials to other users, please share this information with them.

If you should require further information regarding either SiH materials or other silicones products, please contact your silicone supplier.

SEHSC, a trade association representing silicone manufacturers in North America, has prepared this document for use by its members. SEHSC makes no express or implied warranties as to the accuracy of this document and has no responsibility to amend or revise this document. No person should rely on this document as a primary reference, but rather should consult published materials, relevant MSDSs, and/or the appropriate individuals within a silicone manufacturing company for further information.

¹ Also known as silicon hydride containing polysiloxanes; H-Siloxane; Hydrogen functional polysiloxane; Siloxanes and silicones, di-Me; Me H, H-terminated PDMS; Hydrogen terminated polydimethylsiloxane; Siloxanes and silicones, di-Me, H-terminated