

DEKRA EXAM GmbH · P.O. Box 1027 48 · 44727 Bochum · Germany

Solimar Pneumatics  
8001 Ranchers Road NE  
Minneapolis, MN 55432  
USA

DEKRA EXAM GmbH  
Expert Body for Explosion Protection -  
Mining Test Facility

Dinnendahlstrasse 9  
44809 Bochum  
Germany  
Telephone +49.234.3696-180  
Telefax +49.234.3696-150

Contact Dorothea Schwarz  
Tel. direct +49.234.3696-170  
Fax direct +49.234.3696-150  
E-Mail dorothea.schwarz@dekra.com  
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## **Brief assessment on the electrostatic ignition hazards of Solimar pneumatic fluidizers**

With reference to your e-mails of 2th March 2014 and 4th April 2014 we would like to give the following assessment:

The Solimar pneumatic fluidizers are intended for loosening products in containers and silos where flammable gases and vapours are not present. Depending on the container size, several evenly spread fluidizers can be used in combination.

The fluidizers consist of a metal stem (material used: steel, aluminum or stainless steel) onto which a round plastic disc with a drilled hole at its centre is mounted (material used: silicone or EPDM, diameter: 5 cm or 10 cm). The stem head sticks slightly out of the disc. If used as intended, the stem is screwed into the container wall and connected to an air supply line; the inflow of compressed air through the stem and under the plastic disc makes the disc vibrate and helps to loosen the dust-shaped product and improve its flow quality.

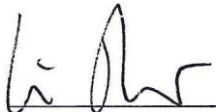
**Due to the functionality of the fluidizers no processes are to be expected that will lead to strong electric charges; on the condition that flammable gases and vapours are not present, there are no objections against using the Solimar pneumatic fluidizers in Dust-Ex atmospheres of zones 20, 21 and 22 as far as their electrostatic properties are concerned.** The plastic materials used are not expected to cause incendive electrostatic discharges that may ignite flammable dusts according to current state of knowledge. However, it is compulsory to ground the metal stems.

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This assessment refers to the pneumatic fluidizers (material used: silicone or EPDM) of both diameters, those of 5 cm and those of 10 cm. Likewise, there are no objections to use more than one fluidizer in a container or silo as far as their electrostatic properties are concerned.

Please do not hesitate to contact us if you have any further questions.

Yours sincerely  
DEKRA EXAM GmbH



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Dr Ute Hesener



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Dorothea Schwarz