SONO 900 High-Temperature Ultrasonic Couplant

GENERAL DESCRIPTION

Sono 900 is a thick, gritty, stay-in-place paste couplant for thickness gauging.

OPERATIONAL TEMPERATURE RANGE*

Thickness Gauging: 600 – 680°F (316 – 360°C)

NOTE: In areas where flame or other ignition source may be present, or in applications where vapors may be confined in an enclosed or semi-enclosed area, these products should not be used above the flash point temperature.

BENEFITS

- High viscosity paste adheres well to transducers at high temperatures

PROPERTIES* (AT AMBIENT TEMPERATURE)

Viscosity	>4,000,000 cps (Brookfield LV #5 at 0.3 rpm)
Flash Point[1]	460°F, 238°C (Cleveland Open Cup)
Autoignition Temperature[2]	770°F, 410°C

[1]Flash point temperature determined in accordance with ASTM Method D92 using the Cleveland Open Cup method. In areas where vapors may be confined in an enclosed or semi- enclosed area, the actual flash point of this product may be lower than recorded.

[2]Autoignition temperature determined in accordance with ASTM Method E659.

METHOD OF APPLICATION

In most applications, the transducer is best coupled with the thinnest layer of couplant possible. Apply a small bead of couplant directly to the centre of the transducer face and push the transducer down onto the test surface with a uniform force so the couplant spreads out evenly towards the edge of the transducer.

In high-temperature applications it is recommended that extra care is taken to use just enough couplant to perform the test procedure as excess couplant may increase vapors which can pose a flash hazard.

*Refer to Extreme-Temperature Guidelines for more information

EXTREME-TEMPERATURE GUIDELINES

Before use, make sure the surface temperature of the test piece does not exceed the maximum specified temperature for the application and environmental conditions.

At high temperatures, couplants evaporate relatively quickly; more couplant may be required near the upper end of the operating temperature range to compensate for evaporation. Care should be taken to avoid using excess couplant as this may lead to increased vapors which can pose a flash hazard.

The flash point of a material is the lowest temperature at which it can vaporize to form an ignitable mixture in air. At the flash point temperature, the material vapor will flash only if an ignition source is present and the vapor may cease to burn when the ignition source is removed. In areas where vapors may be confined in an enclosed or semi-enclosed area, the flash point of a material may be lower than the recorded value.

The auto-ignition temperature of a material is the lowest temperature at which it will spontaneously ignite in a normal atmosphere without an external source of ignition, such as a flame or spark. Environmental or atmospheric factors will affect autoignition temperature; therefore it is important to observe a suitable safety margin in conjunction with autoignition temperature.

Smoke develops as the couplant begins to decompose due to heat exposure. Smoke is not an indication the couplant is not working, but it does indicate the effective coupling time is limited. Smoke produces vapors which may lower the couplant flash point, particularly in enclosed or semi-enclosed areas.

A couplant's upper temperature range for short duration thickness gauging is higher than when used for flaw detection.

REMOVAL

Remove excess couplant from transducers and other surfaces by wiping with cloth material which does not present a fire hazard, being careful to protect skin from hot surfaces.

Do not use solvent-based cleaners on hot surfaces!

PACKAGING

4 oz. (100 g) Tube
1 gal. (4 liter) Cubitainer

SAFETY

Extra care should be taken when operating with couplants in high-temperature applications; refer to Extreme-Temperature Guidelines for pertinent information regarding couplant behavior and properties at high-temperatures.

Sono 900 does not contain perfluorocarbons (PFCs) or fluorinated material, which can cause adverse health effects at high temperatures. "Polymer fume fever" is not an operator hazard.

Use all recommended Personal Protective Equipment when handling and using Sono 900.
Please refer to the Material Safety Data Sheet for additional information.

*Refer to Extreme-Temperature Guidelines for more information