SONOTEMP® extended range ultrasonic couplant

Sonotemp is particularly useful in high temperature thickness gaging; however, it may be applied to any ultrasonic procedure where elevated temperature presents sound coupling difficulties, such as long-term flow metering. Maintains paste-like viscosity throughout its effective operating range.

Temperature Operating Range

Thickness Gaging 0º to 700ºF (-18º to 371ºC)
Flaw Inspection: 30° to 600°F (-1° to 315°C)

Benefits

- Resists drying, allowing long-term coupling without reapplication.
- The best choice for long-term flow metering

Safety

- Non-toxic, non-irritating, biodegradable
- Contains NO perfluorocarbons or fluorinated material, which can cause adverse health effects at high temperatures

Removal

- Can be removed with detergent and water

Chemical Analysis and Certification

Independent laboratory analysis of Chlorine and Sulfur reference ASTM procedures is furnished with each shipment at no additional charge.

Chemistry

Total Halogens..... <100ppm
Sulfur..... <50ppm

Properties

[1] *At ambient temperature.*

Viscosity[1]
Paste.....>4,000,000 cps
(Brookfield LV #5 @ 0.3 rpm)
Velocity[1].....0.65±.05 mm/µsec
Acoustic Impedance[1].....1.55±.05 MRayls
Auto Ignition temperature.....1065ºF (574ºC)

Extreme Temperature Guidelines

- *A couplant's upper temperature range for short duration thickness gaging is higher than when used for flaw detection.*
- *When testing on vertical or overhead surfaces, a thicker grade of couplant is likely to stay in place, but thinner grade generally performs better on flat surfaces.*
- *No Sonotech couplants contain perfluorocarbons; thus "polymer plume fever" is not an operator hazard.*

Flash Point and Auto Ignition

Sonotech provides the flash point and auto-ignition temperature for each high temperature product.

- *The **Flash Point** of a product is the lowest temperature at which vapors arising from the product will ignite momentarily when exposed to a flame.*
- ***Auto Ignition** is the temperature at which a substance ignites without other sources of energy.*

Two general methods of flash point testing are called closed-cup and open cup. The closed cup method (Pensky-Martens) prevents vapors from escaping and therefore usually results in a flash point that is lower than in an open cup (Cleveland) test. The system for flash point determination for medium to high temperature products (140ºF to 680ºF/60º to 360ºC) utilizes the Pensky-Martens closed cup test.

- ***For the flash point of Sonotemp please reference the MSDS on opposing side.***

SONOTECH® INC

774 Marine Drive, Bellingham, WA 98225-1530 360-671-9121 Fax 360-671-9024 www.sonotech-inc.com
sonotech@sonotech-inc.com Order Phone: 800-458-4254 Order Fax: 800-730-9024