SONO 600 high temperature ultrasonic couplant

ENVIRONMENTALLY BENIGN

Sono 600 is a biodegradable formula for flaw detection, thickness gaging, and acoustic emission testing in petrochemical, power generating industries, food processing machinery, and pharmaceutical manufacturing and storage equipment.

Temperature Operating Range

Thickness gaging: 0º to 600ºF (-18º to 315ºC)
Flaw inspection: 50º to 500ºF (10º to 260ºC)

Benefits

- Excellent corrosion inhibition on all metals
- Very slow drying; allows for long-term coupling Economical alternative to silicone based couplants
- Biodegradable formula suitable for food processing equipment inspection

Safety

- Non-toxic, non-irritating, biodegradable
- Smokes less at elevated temperatures than most high temperature coupling materials
- Contains NO water, glycerine, solvents, petroleum products, and NO perfluorocarbons or fluorinated material, which can cause adverse health effects at high temperatures

Removal

- Remove excess couplant by wiping with disposable rags or paper towels. For removal using aqueous solutions (non-solvent based), consider: Shocon, Aqueous Reactivator, Power Purge, Citrikleen XPC, CIS Resolve and ZEP-EZ citrus turpentine products. For more complete removal of residual films using solvents, select from the following: aliphatic hydrocarbons, aromatic hydrocarbons, higher alcohols, isoparaffins, higher keytones, ethers.

Properties

Viscosity (*At ambient temperature)*
Fluid…….~2,500 cps (Brookfield LV #3 @ 30 rpm)
Gel.....~500,000 cps (Brookfield LV #5 @1.5 rpm)
Velocity.....……..1.50± .05 mm/µsec
Acoustic Impedance.....1.35 to 1.40 MRayls

Chemical Analysis and Certification

Independent laboratory analysis of Chlorine and Sulfur referencing ASTM procedures is provided with each shipment at no additional charge and at www.sonotech-inc.com

Total Halogens.....<150 ppm
Sulfur.....<150 ppm

Corrosion Inhibition

A basic premise in NDT is that it must be truly nondestructive. The couplant must not cause detrimental metallurgical damage to the part through corrosion.

- Sono 600 contains a ferrous corrosion inhibitor with a relative effectiveness rating of 100 and is compatible with most composites and metals. Ferrous Corrosion Characteristics Chart available at http://www.sonotech-inc.com

High 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 a thinner grade generally performs better on flat surfaces.
- Sonotech couplants do not contain perfluorocarbons; thus "polymer fume 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.

Auto Ignition temperature……..…935ºF (501ºC)
Cleveland Open Cup Flash Point……..445ºF (229ºC) [2]
Pensky Martin Closed Cup Flash Point…445ºF (229ºC) [3]
[2] *Gel* [3] Fluid

Packaging – Sono 600 Gel

2 oz (50 g) tube	4 oz (100 g) tube
quart (liter)	gallon (4-liter)

Sono 600 Fluid is available by custom order in gallon containers, (minimum of two gallons).

SONOTECH® INC

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