



SONOTECH[®]

Sound Technology. . . Sound Results[™]

NDT Couplants



Sonotech® Offers The Industry's Leading Lineup Of NDT Couplants With Formulations & Technical Support To Get The Job Done Right!

Couplant is used in ultrasonic NDT inspection to facilitate and enhance the transmission of sound energy from the transducer to the test part. Its presence displaces air which even in small amounts can attenuate a signal and cause it to be deflected away from the part. Using a thin layer of couplant allows greater sound energy to enter the test piece so that more of the ultrasonic signal can be detected to improve the accuracy of the reading.

Just as an inspector must carefully determine the specific wave frequency of the transducer to be used in ultrasonic testing, the properties of the couplant must be properly selected if successful test results are to be obtained. A couplant's viscosity, surface wetting and anti-corrosion characteristics, evaporation rate, acoustical impedance, temperature range and environmental impact must all enter into the selection equation. Fortunately, the Sonotech® line of couplants from Magnaflux offers NDT professionals a lineup of over twenty-five leading, time-tested couplants and water treatment additives whose properties have been precisely formulated to maximize inspection results - *each and every time*.

Whether your requirements include meeting Halogen, Sulfur and low melting point specifications for the nuclear power industry, high level environmental and acoustics standards, or temperature operating ranges beyond 1000° F, you will find all your needs well met by an industry leading Sonotech® couplant. Available in four categories; General Purpose, Environmentally Benign, High Temperature and Speciality Application, along with pack sizes to meet every testing need, Sonotech® brand couplants and support staff are standing by to help you get the job done right.

GENERAL PURPOSE COUPLANTS



ULTRAGEL II® (Silicone-free)

Ultragel II® has been recognized as the industry's most specified and used ultrasonic couplant for more than 35 years. It possesses outstanding acoustic performance, chemical characteristics and corrosion inhibition and is ideal for flaw detection, thickness gaging, flow metering and acoustic emission testing across a broad temperature boundary (-10° to 210° F). Ferrous corrosion inhibition rating - 90.

SPECIFICATIONS: ASTM F519, F945 • BOEING BAC 5439-PSD622, 5968, 5980 • PRATT & WHITNEY PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F945), AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375.

PACK SIZES:

1 Gal.	# 25-901	4 oz. Bottle (12-pack)	# 25-904
5 Gal.	# 25-905	12 oz. Bottle (12-pack)	# 25-912
55 Gal.	# 25-955		



SONOTRACE® (Glycerine-free)

Sonotrace® is a Glycerine and Silicone-free, water-based couplant formulated for flaw detection and thickness gaging applications where Halogens, Sulfur and low melting point metals must be kept

to a minimum. It comes in three viscosities from low viscosity fluid to very high viscosity gel and has an operational temperature range of 25° - 175° F. Ferrous corrosion inhibition rating - 80.

SPECIFICATIONS: Boeing BAC 5968 and 5980.

PACK SIZES:

Grade 30

1 Gal.	# 42-901	55 Gal.	# 42-955
5 Gal.	# 42-905		

Grade 40

1 Gal.	# 43-901	55 Gal.	# 43-955
5 Gal.	# 43-905		



ECHOGEL® (Glycerine-free)

Echogel is a Glycerine and Silicone-free couplant formulated for use in inspections where salt cake or metal corrosion salts are present. It resists viscosity breakdown on salt-caked boiler surfaces and other corroded materials and contains a

ferrous corrosion inhibitor with a relative effectiveness rating of 65. Operating temperature range: 27° to 140° F.

SPECIFICATIONS: ASTM F519 • Boeing BAC 5439-PSD622 • NAV-SHIPS MIL STD 767 AND 2041.

PACK SIZES:

Grade 14

1 Gal.	# 47-901	55 Gal.	# 47-955
5 Gal.	# 47-905		

Grade 20

1 Gal.	# 48-901	55 Gal.	# 48-955
5 Gal.	# 48-905		

ENVIRONMENTALLY BENIGN COUPLANTS



SOUNDSAFE®

Soundsafe® is a Silicone-free, environmentally benign high-performance couplant formulated for use in overhead vertical and horizontal applications where concern for the environment is a primary consideration. It possesses high humectant levels

to slow drying, increase acoustic impedance and provide transducer lubrication, and contains ferrous corrosion inhibitors with a relative effectiveness rating of 75.

Soundsafe® has an operating temperature range of 0° - 200° F. It is compatible with most composites and metals, except magnesium and magnesium alloys which should be pretreated before use.

SPECIFICATIONS: ASTM F945 • BOEING BAC 5439-PSD622, 5968, 5980 • PRATT & WHITNEY PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F945), AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375.

PACK SIZES:

1 Gal.	# 20-901	4 oz. Bottle (12-pack)	# 20-904
5 Gal.	# 20-905	12 oz. Bottle (12-pack)	# 20-912
55 Gal.	# 20-955		



SONOGLIDE® FE (Silicone- free)

Sonoglide® FE is an environmentally benign, Silicone-free couplant specially formulated for ferrous metals where short-term corrosion is a concern. It contains a ferrous corrosion inhibitor with a relative effectiveness rating of 75, is slow drying and will remain stable on corroded or salt covered surfaces. Operating temperature range: -60° to 250° F.

PACK SIZES:

Grade 10

55 Gal. # 76-955*

* Minimum order of 4 drums

PACK SIZES:

Grade 20

1 Gal. # 82-901 55 Gal. # 82-955
5 Gal. # 82-905



SONOGLIDE® UP (Ultra-Pure)

Sonoglide® UP is an ultra-pure, environmentally benign, Silicone-free couplant that is compatible with titanium, aluminum, copper, stainless steel, plastics, many magnesium alloys, and many composites. It is the perfect choice for applications where Halogens and Sulfur must be at a minimum and broad material compatibility, slow drying and water wash removability are desired. Operating temperature range: -60° to 250° F.

SPECIFICATIONS: PRATT & WHITNEY PWA 286, 275, 1484, 36604, 36700, MCL E-205 Type II (ASTM F945) • AMS 5544, 5536, 6359, 4037, 5608 (Haynes 188), 5508, 4375 • ASTM FP45.

PACK SIZES:

Grade 7

1 Gal. # 84-901 55 Gal. # 84-955
5 Gal. # 84-905

Grade 10

1 Gal. # 85-901 55 Gal. # 85-955
5 Gal. # 85-905

Grade 40

1 Gal. # 87-901 55 Gal. # 87-955
5 Gal. # 87-905



SOUNDCLEAR®

Soundclear® is an excellent price to performance ratio environmentally benign couplant for flaw detection and thickness gaging. It contains humectants to slow drying and increase acoustic impedance and has an operating temperature range of 20° to 200° F. Soundclear® contains a corrosion inhibitor for steel with a relative effectiveness rating of 45 and is compatible with aluminum, titanium and plastics. It is not recommended for use with magnesium.

PACK SIZES:

Grade 60

1 Gal. # 31-901 55 Gal. # 31-955
5 Gal. # 31-905

HIGH TEMPERATURE COUPLANTS

SONO®



The Sonotech® family of Sono® couplants comes in temperature formulas of 600° through 1100° F. The product's biodegradable formulas have made it the leading choice for use in flaw detection, thickness gaging and acoustic emission testing in the petrochemical, power generation, food processing machinery and pharmaceutical manufacturing and storage equipment markets.

TEMPERATURE RANGES & PACK SIZES:

Sono® 600 (0° to 600° F)

1 Gal. # 45-901
4 oz. Tube # 45-T04

Sono® 900 (600° to 900° F)

1 Gal. # 40-901
4 oz. Tube # 40-T04

Sono® 950 (600° to 950° F)

1 Gal. # 29-901
4 oz. Tube # 29-T04

Sono® 1100 (700° to 1100° F)

1 Gal. # 30-901
4 oz. Tube # 30-T04



PYROGEL®

PyroGel® couplant offers the broadest temperature range (-50° to 880 °F) for thickness gaging, flow metering, acoustic emissions testing and flaw detection. It is radiation proof, contains no polymers and resists drying, making it an excellent choice for long term flow metering applications. Ferrous corrosion inhibition rating - 100.

PACK SIZES:

Grade 7*

1 Gal. # 21-901

* Minimum order of 2

Grade 60

1 Gal. # 23-901
4 oz. Tube # 23-T04

Grade 100

1 Gal. # 24-901
4 oz. Tube # 24-T04

SPECIALTY APPLICATION COUPLANTS



HIGH Z®

High Z® provides the highest acoustic impedance of all Sonotech® couplants to reduce surface noise and improve coupling performance on curved, rough, pitted and corroded surfaces. Its environmentally benign formula can be removed with water and it will often facilitate flaw inspection and thickness gaging when no other couplant will function. High Z® is available in two viscosities (low viscosity and high viscosity) with an operating temperature range of 0° to 200° F. Ferrous corrosion inhibition rating - 70.

PACK SIZES:

High Z® LV (Low Viscosity)

4 Oz. Tube # 58-T04

High Z® HV (High Viscosity)

4 Oz. Tube # 59-T04



SHEAR GEL®

Shear Gel® is specially formulated to provide coupling for shear wave generated by normal incidence (zero degrees) shear wave transducers. It has an extremely high viscosity and an operation temperature range of 40° to 90°F. Ferrous corrosion inhibition rating - 85.

PACK SIZES:

4 Oz. Tube # 54-T04



THERMASONIC®

Thermasonic® has been formulated for use where rapid wetting, slow drying, broad temperature range (0° to 325°F) and easy water removal are required. It is environmentally benign, offers excellent corrosion inhibition, resists running and dripping and has a slow evaporation rate. Ferrous corrosion inhibition rating - 85.

PACK SIZES:

Grade 8*

1 Gal. # 28-901

* Minimum order of 2

Grade 60

1 Gal. # 79-901

UT WATER TREATMENT ADDITIVES



UT-X® POWDER

UT-X® Powder is a couplant concentrate useful for flaw detection and thickness gaging applications where ferrous corrosion inhibition is not a concern. It retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, plates and welds.

Operating temperature range: 32° to 120° F.

PACK SIZES:

1-Gal. Packet # 62-001

5-Gal. Packet # 62-005

UT-X FE® POWDER

UT-X FE® Powder is an environmentally benign couplant concentrate useful for flaw detection and thickness gaging applications where ferrous corrosion inhibition is required. It performs well and retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, welds and ship plate. Operating temperature range: 32° to 120° F.

PACK SIZES

1-Gal. Packet # 63-001

5-Gal. Packet # 63-005

Sonotech® couplants offer enhanced sound transmission to maximize NDT inspection results and part integrity. . .



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