

Echo Couplant Solutions

<i>All Echo Ultrasonics® couplants have been formulated with operator safety and environmental regulations as a priority.</i>						
	Couplant	Key Benefits	Viscosity	Temperature Range	Corrosion Characteristics	
Ambient Temperature	UltraSoniX™	<ul style="list-style-type: none"> • Glycerin-free, in accordance with FAA Advisory Circular issued 9/20/2013 AC 25-29 • Overhead/vertical application (medium and high viscosity) • Slow drying • Fast Wetting • No nitrates, nitrites, glycol ethers or formaldehyde • Water soluble, acrylic polymer, least residue 	High Medium	10 to 220°F -12° to 104°C	Very good Meets ASTM F519	
	EchoTrack™	<ul style="list-style-type: none"> • Economical high performance • Overhead / vertical application (medium & high viscosity) • Slow drying • Fast wetting • No nitrates, nitrites, glycol ethers or formaldehyde • Water soluble, acrylic polymer, least residue 	High Medium	18° to 180°F -8° to 82°C	Very good	

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Ambient	EchoPure™	<ul style="list-style-type: none"> Couplant of choice for Phased Array Manual UT Inspection (PAMUT). Eliminates dry spots under the wedge and resulting element drop out. Improves defect reproducibility. Complies with P91 steel inspection requirement for a water-free couplant. Broadest temperature range for water-soluble couplants No couplant build up which can result in false indications. Very slow drying and salt stable Overhead / vertical application Excellent transducer lubrication 	High Medium Low Fluid	-60 to 350°F -51 to 176°C	Very good Meets ASTM F519
	SoniX™	<ul style="list-style-type: none"> Salt stable (boiler and corrosion salts, etc.) Strong lubricious coupling film Fast Wetting No nitrates, nitrites, glycol ethers or formaldehyde Glycerin-free Water soluble, cellulose based 	High viscosity fluid 40,000 cps	18° to 120°F -8° to 50°C	Very good Meets ASTM F519
	ECONOGel™	<ul style="list-style-type: none"> Most economical UT couplant Glycerin and silicone-free Completely salt stable 	Medium Viscosity	26° to 120°F -3.3° to 48°C	Good

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	Glycerin	<ul style="list-style-type: none"> • Packaged from USP glycerin, 99+% • Will not harden on equipment • Pumpable fluid • Boiling point 555°F / 290°C • Compatible with most plastics 	Low viscosity fluid	65° to 500°F 18° to 260°C	Can be corrosive to carbon steel and aluminum No corrosion effect on most plastics, fiberglass or composites
Powder	EchoMix® Powder	<ul style="list-style-type: none"> • Powder couplant easily mixed in water • Good wetting • Salt resistant • No formaldehyde • Compact for shipping and storage • Water soluble • Operating range can be extended with propylene glycol antifreeze 	Medium gel 23,000 cps Adjustable low to high	32° to 120°F 0° to 50°C	Mild, short term ferrous corrosion inhibition
	EchoMix Powder SINGLE	<ul style="list-style-type: none"> • ONE PART powder • Easily mixed in water • Good wetting • Salt resistant • No formaldehyde • Compact for shipping and storage • Water soluble • Operating range can be extended with propylene glycol antifreeze 	Medium gel 23,000 cps Adjustable low to high	32° to 120°F 0° to 50°C	Mild, short term ferrous corrosion inhibition

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Specialty	Echo Shear Wave	<ul style="list-style-type: none"> • Transmit normal incidence shear wave • Water soluble • Easily removed with water wash • Low toxicity, non-irritating 	High viscosity paste	40 to 90°F 4° to 32°C	
	Echo Z+	<ul style="list-style-type: none"> • High acoustic impedance • Decreases surface noise • Ideal for rough surfaces and concrete • Strong ferrous corrosion inhibition 	Medium viscosity paste or Fluid	0 to 200°F -18° to 93°C	Strong ferrous corrosion inhibition
	Echo 8ZH	<ul style="list-style-type: none"> • For flow metering and long term monitoring at elevated temperatures • Enhanced acoustic impedance • Reduces acoustic noise from rough surface 	Paste	Short term: -45 to 750°F Long term: -45 to 400°F	
High Temperature	VersaSonic®	<ul style="list-style-type: none"> • Broad operating range – subzero to 700°F • Best performing UT couplant between 300 and 700°F • Fast Response, no wait time • Low smoke / Low toxicity /No char residue • Does not contain peanut oil 	Gel and paste	-10° to 700°F -23 to 371°C	Best long-term corrosion protection Meets ASTM F519
	HiTempco	<ul style="list-style-type: none"> • Less smoke than VersaSonic • No residue or varnish • Fast response, no wait time • Excellent corrosion inhibition • Non-toxic, non-irritating 	Paste	-50 to 775°F -45 to 412°C	Excellent corrosion inhibition
	EchoTherm™	<ul style="list-style-type: none"> • Most economical ultra-high temperature couplant for use above 700°F and in ports. • EchoTherm contains a plastic polymer which melts and begins to smoke at 750°F • Leaves plastic residue (char) 	Paste	200° to 1000°F 93 to 538°C	N/A

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	EchoTherm Extreme™	<ul style="list-style-type: none"> • Highest performance extreme temperature couplant • Fast Response, no wait time • No plastic polymer / char residue • Broadest operating range • Low smoke 	Paste	-40° to 1250°F -40 to 675°C	Meets ASTM F519
Fluid	Echo 4HT	<ul style="list-style-type: none"> • Least expensive higher temperature fluid • Water soluble • No oil film when in contact with water • Low toxicity • Good surface wetting • Auto-ignition temperature: 628°F / 331°C 	Fluid	-70 to 450°F -56 to 230°C	Excellent
	VersaSonic FLUID	<ul style="list-style-type: none"> • Excellent corrosion inhibition • Broad operating range • Low toxicity • Does not contain peanut oil • Easily removed with Echo 4HT • Auto-ignition temperature: 788°F / 420°C 	Fluid	-10° to 700°F -23 to 371°C	Excellent Meets ASTM F519
	Echo 8 HT™	<ul style="list-style-type: none"> • Broadest operating range • Three Viscosities: thin to very thick liquid for AUT and MUT • Minimal smoke • Excellent lubricant • Low toxicity / Non-irritating • Non-irritating • Auto-ignition temperature: 850°F / 454°C 	Fluid	-50° to 800°F -45° to 425°C	Excellent

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	SpectrumGlide	<ul style="list-style-type: none"> • Increased viscosity for improved stability and decreased run off at higher temperatures • Minimal residue, minimal smoke • Low toxicity • Non-irritating • Auto-ignition temperature: 752°F / 400°C 	Fluid	-50 to 730°F -45 to 387°C	Excellent	
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