

## Echo Mix Powdered Ultrasonic Couplant

### MIXING INSTRUCTIONS:

1. Measure four quarts of cold or ambient temperature water into a five or six quart pail. If small air bubbles are a concern, de-air the water by using hot water and allow to cool to ambient temperature. Use a long handled slotted spoon for mixing.
2. Straighten metal tabs and unfold; open packet (A) by using pull tabs



3. Sprinkle the contents of the large packet "A" into the water while stirring with an upward vertical circular motion. Continue mixing until all powder is dissolved. (about 2-3 minutes)
4. When the powder is completely mixed with no lumps remaining, open the small packet "B" as above and quickly sprinkle the contents into the water mixture while stirring with an upward circular motion to assure thorough mixing. This step should be done rapidly (15 seconds) and blended so that the blue color is uniform. Continue mixing, alternating between a circular horizontal pattern and a vertical pattern until viscosity increases. (about ½ - 1 minute)
5. Allow the couplant to stand until a working viscosity forms (about 3 minutes)

Note: When possible, pre-fill a pail with hot water and allow to cool overnight. This will de-air the water (reduce air bubbles). Mixing will then produce fewer air bubbles in the resulting gel.

### OPTIMIZING ECHOMIX FOR YOUR APPLICATION:

**To lower viscosity (thinner couplant):** Add one more pint (2 cups) of water **prior** to adding packet "A."

**To increase the viscosity (paste/gel):** Remove one pint (2 cups) of water **prior** to adding packet "A."

**To lower the freezing point to -26 F (-32 C), raise the operating temperature to 250 F and extend drying time:**

Mix the large "A" packet into two quarts of water as directed. **DISCARD** the small packet "B" and replace with two quarts of **propylene glycol** formula anti freeze, following the same directions for "B" packet. (**"B" packet is not used when adding antifreeze**) The couplant will thicken within 60 seconds; therefore, add the anti-freeze smoothly and mix completely within the 60 second window. Appropriate **propylene glycol** anti-freezes include Sierra Antifreeze coolant, Amsoil Propylene Glycol Antifreeze, Prestone Low Tox and are designated as less toxic to animal and pets. **Do not use ethylene glycol antifreeze or methyl alcohol.** These chemicals are toxic to the environment, dangerous to animals and will not work with EchoMix. When using propylene glycol antifreeze, the viscosity of prepared EchoMix will be higher than when mixed with 100% water. If a lower viscosity is desired, use approximately 2/3 of the A packet and discard the remainder.