Echogel

Ultrasonic Couplant

Echogel® is an economical, basic-use couplant for ultrasonic inspections, like flaw detection/sizing and thickness gauging, where salt cake or metal corrosion salts are present. It provides good corrosion inhibition and resists viscosity breakdown on salt-caked boilers and other corroded materials.

Echogel comes in two different viscosities, Echogel 14 which is a thin, flowable gel and Echogel 20 which is a medium-thick gel.

FEATURES

- Enhanced surface wetting to quickly cover oily or dirty surfaces
- Maintains viscosity on corrosion or salt cake
- Good corrosion inhibition
- Silicone free
- Hydrogen embrittlement testing

SPECIFICATION COMPLIANCE

- API
- ASTM F519
- ASME
- AWS

APPLICATIONS

Defect location: subsurface

Ideal for:

- Flaw detection
- Flaw sizing
- Thickness gauging
- Power generating boilers
- Corroded parts
- When corrosion, salt, or salt cake is present
- Large volume flaw inspections
- Small diameter pipe
- Weld inspection
- High strength steel
- OCTG
- Tubular goods
- Pipes, pipe components, connections and couplings

PROPERTIES

Appearance	Transparent gel
Color	Light green
Comparative Viscosity*	Echogel 14: 3
Echogel 20: 5.5	Minimal, negligible
Silicone	No
Glycerin	No
Propylene Glycol	Yes
Halogens	< 50 ppm
Sulfur	< 50 ppm
Water Soluble	Yes

* Subjective measure, 0–10 scale where 0 = water, 5 = medium gel, 10 = very thick paste

USE RECOMMENDATIONS

NDT Method	Ultrasonic Testing
Required Equipment	UT equipment, transducer
Temperature Range†	27 to 140°F / -3 to 60°C
Compatibility	Most composites and metals

† Couplant integrity and acoustic performance may decline beyond these temperature limits.

INSTRUCTIONS FOR USE

Apply a small amount of couplant to the transducer or inspection area before measurement.

REMOVAL

Remove couplant immediately after inspection before the couplant dries with water rinse or a combination of water rinse and brushing. A film may form if the couplant is allowed to dry before removal. Remove film by pressure washing, wire brushing or immersing the part in water until the couplant rehydrates and can be washed or brushed off.

STORAGE

Store couplant in the original container. Do not freeze. Store out of direct sunlight. Keep container closed when not in use. Never put unused couplant back into the original storage container. If pumps or valves are used to dispense bulk couplant, wash them thoroughly between drums to avoid contaminating new product. Refer to Safety Data Sheet for additional storage instructions.

PACKAGING

Echogel 14

1 gal / 3.78 L cubitainer 47-901

5 gal / 18.9 L cubitainer 47-905

55 gal / 208 L drum 47-955

Echogel 20

1 gal / 3.78 L cubitainer 48-901

5 gal / 18.9 L cubitainer 48-905

55 gal / 208 L drum 48-955

HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the product Safety Data Sheet, which is available at **www.magnaflux.com**.