Ultragel II

Ultrasonic Couplant



Ultragel® II is an industry-leading, high-performance, ultrasonic couplant for flaw detection and sizing, thickness gauging, flow metering and acoustic emission testing.

Ultragel II is widely recognized as the industry's most dependable and popular ultrasonic couplant. This general-purpose medium viscosity gel is known for its outstanding performance, excellent corrosion protection, thixotropic properties and comprehensive range of specifications and approvals.

Ultragel II is Pratt & Whitney approved and meets nuclear grade specifications for halogen and sulfur levels.

BENEFITS

- Aerospace Specifications Compliance
- Outstanding performance for a diverse range of applications, including vertical and overhead surfaces
- Slow drying time for extended inspection time or long-term coupling
- High corrosion protection to safeguard parts

FEATURES

- Fills in depressions in rough surfaces
- Provides good transducer lubrication
- Increased acoustic impedance reduces surface noise
- Thixotropic gel
- Great surface wetting
- Nuclear grade
- Hydrogen embrittlement testing

SPECIFICATION COMPLIANCE

- API
- ASTM F519
- ASME
- AWS
- ASTM F945
- ASTM F945 or PWA 36604, MCL E-205 Type II
- Pratt & Whitney PMC 4384

APPLICATIONS

Ideal for:

- Flaw detection
- Flaw sizing
- Thickness gauging
- Flow metering
- Acoustic emission testing
- Vertical or overhead surfaces
- Weld inspection
- Rough surfaces
- Aerospace inspections
- Nuclear inspections
- Composites
- Turbine blades
- Aircraft wheel maintenance

PROPERTIES

Appearance	Transparent gel
Color	Bright blue
Comparative Viscosity*	5
Silicone	No
Glycerin	Yes
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
Usage Temperature‡	-10 to 210°F / -23 to 99°C
Storage Temperature	50 to 86°F / 10 to 30°C
Compatibility	Most composites and metals‡

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

‡ May darken or discolor magnesium.

INSTRUCTIONS FOR USE

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

REMOVAL

Remove couplant with water rinse (warm/hot water recommended), isopropyl alcohol or 100% ethyl alcohol.

STORAGE

Store couplant in the original container. 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.

PART NUMBERS & PACKAGING

Ships to	Packaging	Part Number
North America, Asia and Oceania	12 fl oz / 354 mL bottles (case of 12)	25-912
	1 gal / 3.78 L cubitainer	25-901
	5 gal / 18.9 L cubitainer	25-905
	55 gal / 208 L drum	25-955
Europe, Middle East, & Africa	1 gal / 3.78 L cubitainer	25-901
	5 gal / 18.9 L cubitainer	25-905

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**.