

# 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**

- Clings well to vertical and overhead surfaces
- Fills in depressions in rough surfaces
- Highest corrosion protection
- Slow drying for longer inspection time
- Provides good transducer lubrication
- Increased acoustic impedance reduces surface noise
- Wide range of specifications and approvals
- Thixotropic gel
- Great surface wetting
- Nuclear grade
- Aerospace approvals
- 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**

**Defect location:** subsurface

#### 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

<sup>\*</sup> Subjective measure, 0–10 scale where 0 = water,

#### **USE RECOMMENDATIONS**

NDT Method	Ultrasonic Testing
Required Equipment	UT equipment, transducer
Temperature Range <sup>†</sup>	-10 to 210°F / -23 to 99°C
Compatibility	Most composites and metals‡

<sup>&</sup>lt;sup>†</sup> 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 with water rinse (warm/hot water recommended), isopropyl alcohol or 100% ethyl alcohol.

#### **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**

4 fl oz / 118 mL bottles (case of 12)	25-904
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

## **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**.

Revised: May 2017 magnaflux.com

<sup>5 =</sup> medium gel, 10 = very thick paste

<sup>&</sup>lt;sup>‡</sup> Not recommended on magnesium