Ultragel II

Ultrasound 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

**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

**Specification Compliance**

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Transparent gel</td>
</tr>
<tr>
<td>Color</td>
<td>Bright blue</td>
</tr>
<tr>
<td>Comparative Viscosity*</td>
<td>5</td>
</tr>
<tr>
<td>Silicone</td>
<td>No</td>
</tr>
<tr>
<td>Glycerin</td>
<td>Yes</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>Yes</td>
</tr>
<tr>
<td>Halogens</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Sulfur</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Water Soluble</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

**USE RECOMMENDATIONS**

<table>
<thead>
<tr>
<th>NDT Method</th>
<th>Ultrasonic Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Equipment</td>
<td>UT equipment, transducer</td>
</tr>
<tr>
<td>Usage Temperature</td>
<td>-10 to 210°F / -23 to 99°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>50 to 86°F / 10 to 30°C</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Most composites and metals‡</td>
</tr>
</tbody>
</table>

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

‡ May darken or discolor magnesium.

**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**

- 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](http://www.magnaflux.com).

**INSTRUCTIONS FOR USE**

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