

Ultragel II

ULTRASONIC COUPLANT

超声耦合剂

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 是一款工业领先高性能超声耦合剂, 用于缺陷检测和测量, 测厚, 流量计量, 声发射测试等用途。

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 作为工业最可靠和受欢迎的产品而被广泛认可, 这款通用型中粘度凝胶以其卓越的性能, 出色的防腐蚀保护, 触变性能和广泛的规范标准符合以及认证而著称。

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

Ultragel II 以被普惠公司批准使用, 并且满足核电规范要求的卤素和硫含量。



BENEFITS 优势

- Clings well to vertical and overhead surfaces
对于垂直和顶部表面具有良好的粘附性
- Fills in depressions in rough surfaces 填充粗糙表面凹陷
- Highest corrosion protection 最佳防腐蚀保护
- Slow drying for longer inspection time 缓慢的干燥可以延长检测时间
- Provides good transducer lubrication 提供优秀的传感器润滑效果
- Increased acoustic impedance reduces surface noise
提高声阻抗减少表面噪音
- Wide range of specifications and approvals
满足广泛的规范要求和认证
- Thixotropic gel 触变凝胶
- Great surface wetting 良好的表面润湿
- Nuclear grade 核级
- Aerospace approvals 航天航空认证
- Hydrogen embrittlement testing 氢脆测试

APPLICATIONS 应用

Defect location subsurface

缺陷位置: 表面

Ideal for 适用于

- Flaw detection 缺陷检测
- Flaw sizing 缺陷尺寸测量
- Thickness gauging 测厚
- Flow metering 流量计量
- Acoustic emission testing 声发射检测
- Vertical or overhead surfaces 垂直或顶部表面
- Weld inspection 焊接检测
- Rough surfaces 粗糙表面
- Aerospace inspections 航空航天检测
- Nuclear inspections 核电检测
- Composites 复合材料
- Turbine blades 涡轮叶片
- Aircraft wheel maintenance 飞行器轮毂维修

SPECIFICATION COMPLIANCE 符合规范

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

PROPERTIES 属性

Appearance 外观	Transparent gel 透明凝胶
Color 颜色	Bright blue 亮蓝色
Comparative Viscosity 相对粘度*	5
Silicone 硅	No 不含
Glycerin 甘油	Yes 含有
Propylene Glycol 丙二醇	Yes 含有
Halogens 卤素	<50 ppm
Sulfur 硫	<50 ppm
Water Soluble 水溶性	Yes 溶于水

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

主观测量, 0–10分级 0 = 水, 5 = 中等胶状, 10 = 极粘稠膏状。

USE RECOMMENDATIONS 使用推荐

NDT Method 无损检测方法	Ultrasonic Testing 超声检测
Required Equipment 设备要求	UT equipment, transducer 超声检测设备, 传感器
Usage Temperature 使用温度†	-23 - 99°C
Storage Temperature 储存温度	10 - 30°C
Compatibility 相容性	Most composites and metals† 与大多数复合材料以及金属相容

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

超过该温度范围耦合剂完整性和声学性能会下降。

‡ May darken or discolor magnesium.

可能导致镁金属颜色变深或者变色。

INSTRUCTIONS FOR USE 使用指南

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

测量前涂抹少量耦合剂在传感器上或者检测区域即可。

REMOVAL 清除

Remove couplant immediately after inspection before the couplant dries with water rinse or a combination of water rinse and brushing.

A difficult-to-remove 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.

检测结束后立即去除耦合剂以免耦合剂干燥, 可以用水冲洗或用水刷洗。如果去除前耦合剂干燥会形成一层难去除的膜, 要去除该膜需要加压清洗, 钢丝刷洗或浸泡在水中直到耦合剂再次湿润后冲洗或刷洗。

STORAGE 储存

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.

使用原包装储存耦合剂, 切勿冷冻。避免阳光直射。不使用时保持容器封闭, 不要将未使用耦合剂放回原包装。如果使用泵和阀门分散散装耦合剂请在换桶搅拌前彻底清洗它们以免污染新的产品。更多的储存说明请参考SDS (安全数据表)。

PACKAGING 包装形式

25-912	12 fl oz / 354 mL bottles (case of 12) 12盎司瓶 (每箱12瓶)
25-901	1 gal / 3.78 L cubitainer 软方桶
25-905	5 gal / 18.9 L cubitainer 软方桶
25-955	55 gal / 208 L drum 桶

HEALTH AND SAFETY 健康和安全

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.cn.

产品使用前请阅读相关的健康和信息安全。完整的健康和信息安全参考www.magnaflux.cn上的SDS (安全数据表)。