

ZL-27A

LEVEL 3 POST EMULSIFIABLE FLUORESCENT PENETRANT

3级灵敏度后乳化荧光渗透剂

Post-emulsifiable ZL-27A is a Level 3, high-sensitivity Type 1 penetrant designed for inspections which require maximum process control and reliability, such as safety-critical aerospace testing.

作为一款3级灵敏度后乳化1型渗透液ZL-27A 被设计用于需要最大程度的可控性和可靠性的检测工艺, 例如涉及安全的关键航空检测。

Since ZL-27A is not water soluble, there is minimal risk of this penetrant being removed from a fine or shallow defect through over-washing to provide the highest reliability of any penetrant inspection method.

由于ZL-27A不溶于水, 几乎没有因为过清洗而导致细小或者较浅的缺陷中渗透液被去除的风险, 对于任何渗透检测方法都能够提供最佳的可靠性。

ZL-27A has a high flash point and provides long tank life when used in open dip tanks, but this penetrant can also be applied in a variety of other ways, including electrostatic spray.

ZL-27A 具有高闪点并在开放式浸没槽中能够长时间使用, 同时这款渗透液也可以应用于其他多种方法, 包括静电喷涂。

To remove surface ZL-27A penetrant before developer application, use ZE-4E Method B lipophilic emulsifier or ZR-10E Method D hydrophilic emulsifier can be used.

在显像前清除表面多余ZL-27A可以使用方法B亲油性乳化剂ZE-4E或者方法D亲水性乳化剂ZR-10B。

ZL-27A is listed on the QPL SAE AMS 2644 Qualified Product List and is approved for use by Pratt & Whitney.

ZL-27A 被收录在QPL SAE AMS 2644的合格产品名录中, 并被普惠公司批准并使用。

BENEFITS 优势

Improve indication detection

提高缺陷指示

- Clear, bright indications are easier to detect due to high UV and thermal stability – even for small flaws and discontinuities.

由于紫外光稳定性和热稳定性出众, 清晰明亮的缺陷显示可以轻易测出缺陷, 即便是非常细小的缺陷。

- Indications stand out more since background fluorescence is minimized; emulsifiers only remove surface penetrant without the risk of over-washing.

由于背景荧光残余极少, 缺陷显示非常明显, 乳化剂只会清除表面多余渗透液, 不会担心过清洗的风险。

Maximize penetrant inspection process control

提供最大化渗透检测工艺控制

- Prevents over-washing since ZL-27A cannot be removed with water (unless combined with an emulsifier).

由于ZL-27A不会被水清洗掉, 可以防止过清洗 (除非与乳化剂结合)

- PE penetrant system is less susceptible to human error since only surface penetrant is removed in the final rinse stage.

由于最后清洗阶段只会移除表面多余渗透液, 所以后乳化渗透液体系不易受到人为误差干扰。

Wide range of inspections

应用范围广

- Inspect a wide range of high-value components without fear of corrosion or specification non-conformance.

适用于多种高价值工件, 无需担忧腐蚀或者不符合标准。

- Meets all major industry and NDT specification requirements, including Aerospace Prime and OEM specs, AMS 2644 and ISO 3452.

能够满足所有主要工业和无损检测规范要求, 包括航天航空标准, OEM规范, AMS 2644 和ISO 3452等。

Maximize operator comfort and safety

极高的舒适度和安全性

- Promotes better inspection quality by providing the operator with a more comfortable work environment.

ZL-27A可提供一个更舒适的工作环境, 从而提高检测质量。

- Reduces discomfort from strong odors.

减少强烈的刺激气味。

- Exceeds all EHS requirements

高于所有的EHS要求

FEATURES 特性

- Level 3 high sensitivity
3级灵敏度
- Post emulsifiable
后乳化型
- Bright indications
明亮的缺陷显示
- Resists over-washing or over-removal
优秀的抗过清洗性能
- High flash point
高闪点
- Wide range of application methods
应用方法广泛
- Low odor
低气味
- Very low toxicity
极低毒性
- Alloy compatibility
与合金相容性好
- High thermal resistance
热稳定性好
- High UV stability
UV稳定性高
- QPL SAE AMS 2644 Qualified Product List
列入SAE AMS 2644合格产品目录
- Approved for use by Pratt & Whitney
普惠准入资格

SPECIFICATIONS 符合规范

- AECL
- AMS 2644
- ASME BPVC
- ASTM E1417
- ASTM E165
- Boeing BAC 5423 PSD 6-46 or 8-4
- Boeing PS-21202
- ISO 3452
- MIL-STD-2132
- MIL-STD-271
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 4353
- QPL SAE AMS 2644

APPLICATIONS 应用

Defect location: open to surface

缺陷位置：表面开口缺陷

Ideal for 适用于

- Detecting fine discontinuities 检测细小裂纹
- Critical components 关键零部件
- Precision castings 精密铸件
- Precision forgings 精密锻件
- Machined components 机加工件
- Immersion dip tank 浸泡槽
- Electrostatic spray 静电喷涂

Defect examples 缺陷类型

- Fine cracks 细小裂纹
- Seams 裂缝
- Porosity 气孔

USE RECOMMENDATIONS 使用推荐

NDT Method 无损检测方法	Penetrant Testing, Fluorescent 渗透检测, 荧光
Type 渗透液类型	1
Method(s) 去除方法	B/C/D
Sensitivity Level 灵敏度等级	3, high sensitivity 3 级, 高级灵敏度
Required Equipment 设备要求	UV light source 紫外线光源
Temperature range 温度范围	40 - 125°F / 4 - 52°C

PACKAGING 包装形式

01-3187-78C	Aerosol can, case of 12 气雾罐 (12罐每箱)
01-3187-50C	20 L pail 20升桶
01-3187-60C	200 L pail 200升桶

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安全信息。完整的健康和安全信息参考 www.magnaflux.cn 上的 SDS (安全数据表)。