

ZL-60D

LEVEL 2 WATER WASHABLE FLUORESCENT PENETRANT

2级灵敏度可水洗荧光渗透剂

Developed for testing rough machined surfaces, and to readily wash off rough surfaces, ZL-60D medium sensitivity (Level 2) fluorescent water washable penetrant will find indications in castings, forgings, extrusions, and rough machined surfaces. Indications appear for cracks, seams, laps, cold shuts, laminations and porosity.

ZL-60D是2级灵敏度可水洗型荧光渗透剂。为检测粗糙的加工表面而开发，在粗糙的表面上具有优异的可水洗性。可用于检测铸件、锻件、挤压型材、粗糙的机加工表面的裂纹、缝隙、折叠、冷隔、分层和气孔等缺陷。

ZL-60D is safe to use on most engineering and aerospace alloys, such as aluminum, steel, nickel and titanium. The high flash point of ZL-60D allows its use in open tanks. Developers recommended are ZP-4B dry powder, SKD-S2 or ZP-9F solvent-based or ZP-5B water based.

ZL-60D可以安全的用于大多数的工程和航空合金，例如铝、钢铁、镍、钛。ZL-60D具有高闪点，可以在敞开容器中使用。可采用ZP-4B干粉显像、SKD-S2和ZP-9F溶剂悬浮式显像剂、ZP-5B水悬浮式显像剂。

ZL-60D is listed on the QPL SAE AMS 2644 Qualified Product List and is approved for use by Pratt & Whitney.

ZL-60D列入AMS 2644合格产品目录、普惠准入资格。

BENEFITS 优势

Improve indication detection

提高缺陷指示

- Makes indications stand out more by easily washing excess penetrant off with water.
ZL-60D有着优异的水洗性能，工件背景渗透液残留少，使得缺陷指示更加明显。
- Reduces background fluorescence, even on rough surfaces.
尤其在较难清洗的粗糙表面上，优异的可水洗性，可有效减少背景荧光。

Maximize application versatility

应用范围广

- Ideal for an extensive variety of part types due to Level 2 sensitivity.
ZL-60D作为一款2级灵敏度的荧光渗透液，适用于大量不同类型的工件。
- Universal specification conformance and fast, even surface wetting.
可快速润湿工件表面，符合多种行业标准及规范。

Affordable performance

性价比高

- Drives value at each step of the inspection process
适用于各种检测工艺，性价比高。
- Quickly apply penetrant with high surface wetting
其优异的润湿性能使得渗透过程更快速。
- Easily wash off with water
易水洗
- Use less penetrant over time because of lower drag-out and slower evaporation
每次渗透的带走量更少，以及低蒸发率使得ZL-60D的消耗量少且使用寿命长。

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-60D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

- Bright, high-contrast indications
高亮度、高对比度
- Good removability
良好的可去除性
- Excellent rough surface washability
粗糙表面上优异的可洗性
- Water washable
可水洗
- Level 2 medium sensitivity
2级灵敏度
- High flash point
高闪点
- Very low odor
低气味
- Better surface wetting
良好的表面润湿性
- 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
- Very low toxicity
极低毒性
- Low volatility
低挥发性
- Optimized capillary action
优异的毛细渗透能力
- 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
- GE P3TF2
- GE P50YP107
- Honeywell EMS 52309
- ISO 3452-2
- MIL-STD-2132
- MIL-STD-271
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 4351
- 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

- Castings 铸件
- Forgings 锻件
- Extrusions 挤压型材
- Welds 焊接件
- Machined components 机加工件
- Aerospace alloys 航空合金件

Defect examples 缺陷类型

- Cracks 裂纹
- Laps 折叠
- Seams 裂缝
- Cold shuts 冷隔
- Delamination 分层
- Porosity 气孔

PROPERTIES 属性

Flash Point 闪点	> 200°F / 93°C
Density 密度	0.92 g/ml
Viscosity 粘度 (100°F / 38°C)	10.27 cs
NPE-Free 不含烷基酚	Yes 是

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	A/C
Sensitivity Level 灵敏度等级	2, medium sensitivity 2级, 中级灵敏度
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

01-3272-78C	Aerosol can (case of 12) 气雾罐 (12罐/箱)
01-3272-50C	20 L pail 20升桶
01-3272-60C	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)。