

# ZL-67

## Level 3 Water Washable Fluorescent Penetrant

A high-sensitivity Level 3 penetrant, ZL-67 fluorescent water removeable penetrant is designed to find smaller, finer indications in safety-critical components common to aerospace and engineering applications. ZL-67 penetrant is often used to find flaws in investment castings, jet engine components, and highly machined surfaces.

ZL-67 is specially formulated for strong capillary action which allows it to penetrate defects quickly and bleed out into developer faster and more completely than other penetrants for stronger, higher contrast indications that are easier for inspectors to identify, even when the defects are very fine.

ZL-67 is listed on the QPL SAE AMS 2644 Qualified Product List and is approved for use by Pratt & Whitney.



### BENEFITS

#### Improve indication detection

- Clear, bright, indications appear every time due to high UV and thermal stability
- Higher contrast indications form due to strong capillary action, making them easier to spot

#### Wide range of inspections

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

#### Maximize operator comfort and safety

- Promotes better inspection quality by providing the operator with a more comfortable work environment
- Reduces discomfort from strong odors
- Exceeds all EHS requirements

#### More reliable, consistent inspections

- Maintain penetrant system performance over longer periods of time thanks to low volatility and high water tolerance

### FEATURES

- Level 3 high sensitivity
- Water washable
- Bright, high-contrast indications
- High flash point
- Wide range of application methods
- Controlled washability
- Low odor
- Very low toxicity
- Alloy compatibility
- High water tolerance
- High thermal resistance
- High UV stability
- Optimized capillary action
- Low volatility
- QPL SAE AMS 2644 Qualified Product List
- Approved for use by Pratt & Whitney

## SPECIFICATION COMPLIANCE

- AECL
- AMS 2644
- ASME BPVC
- ASTM E1417
- ASTM E165
- Boeing BAC 5423 PSD 6-46 or 8-4
- Boeing PS-21202
- GE P3TF2
- Honeywell EMS 52309
- ISO 3452-2
- MIL-STD-2132
- MIL-STD-271
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 4360
- QPL SAE AMS 2644

## APPLICATIONS

**Defect location:** open to surface

**Ideal for:**

- Precision castings
- Precision forgings
- Machined components
- Investment castings
- Jet engine components
- Highly machined surfaces
- Aerospace alloys
- Aluminum
- Steel
- Nickel
- Titanium

**Defect examples:**

- Cracks
- Seams
- Porosity

## PROPERTIES

<b>Flash Point</b>	> 200°F / 93°C
<b>Density</b>	0.99 g/cc / 8.24 lb/gal
<b>Viscosity (at 100°F / 38°C)</b>	21.06 cs
<b>NPE-Free</b>	Yes

## USE RECOMMENDATIONS

<b>NDT Method</b>	Penetrant Testing, Fluorescent
<b>Type</b>	1
<b>Method(s)</b>	A / C
<b>Sensitivity Level</b>	3, high sensitivity
<b>Required Equipment</b>	UV light source
<b>Usage Temperature</b>	40 to 125°F / 5 to 52°C
<b>Storage Temperature</b>	50 to 86°F / 10 to 30°C

## PACKAGING

5 gal / 18.9 L pail 01-3274-40

20 gal / 75.7 L drum 01-3274-30

55 gal / 208 L drum 01-3274-45

## 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).