

ZL-60D

Level 2 Water Washable Fluorescent Penetrant

Developed for testing rough machined surfaces, ZL-60D fluorescent water-removeable penetrant is ideal for finding indications in castings, forgings, extrusions and rough surfaces.

This medium-sensitivity penetrant washes off parts quickly and easily, leaving less fluorescent background – even on rough surface – for clearer indications and better inspection reliability.

ZL-60D is one of the most versatile “work-horse” penetrants, customers can use this one penetrant for a wide range of applications on a range of parts to find many different types of defects, including cracks, seams, laps, cold shuts, laminations and porosity.

Broad specification compliance further increase this penetrants flexibility. ZL-60D has excellent alloy compatibility and is safe to use on most engineering and aerospace materials, including aluminum, steel, nickel and titanium.

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



BENEFITS

Improve indication detection

- Makes indications stand out more by easily washing excess penetrant off with water
- Reduces background fluorescence, even on rough surfaces

Maximize application versatility

- Ideal for an extensive variety of part types due to Level 2 sensitivity
- Universal specification conformance and fast, even surface wetting

Affordable performance

- Drives value at each step of the inspection process
- Quickly apply penetrant with high surface wetting
- Easily wash off with water
- Use less penetrant over time because of lower drag-out and slower evaporation

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

FEATURES

- Bright, high-contrast indications
- Good removability
- Excellent rough surface washability
- Water washable
- Level 2 medium sensitivity
- High flash point
- Very low odor
- Better surface wetting
- Alloy compatibility
- High thermal resistance
- High UV stability
- Very low toxicity
- Low volatility
- Optimized capillary action
- 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
- GE P50YP107
- Honeywell EMS 52309
- ISO 3452-2
- MIL-STD-2132
- MIL-STD-271
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 4350
- QPL SAE AMS 2644

APPLICATIONS

Defect location: open to surface

Ideal for:

- Castings
- Forgings
- Extrusions
- Welds
- Machined components
- Aerospace alloys
- Aluminum
- Steel
- Nickel
- Titanium

Defect examples:

- Cracks
- Laps
- Seams
- Cold shuts
- Delamination
- Porosity

PROPERTIES

Flash Point	> 200°F / 93°C
Density	0.92 g/cc / 7.65 lb/gal
Viscosity (at 100°F / 38°C)	10.27 cs
NPE-Free	Yes

USE RECOMMENDATIONS

NDT Method	Penetrant Testing, Fluorescent
Type	1
Method(s)	A/C
Sensitivity Level	2, medium sensitivity
Required Equipment	UV light source
Usage Temperature	40 to 125°F / 5 to 52°C
Storage Temperature	50 to 86°F / 10 to 30°C

PACKAGING

1 gal / 3.78 L, case of 4	01-3272-35
5 gal / 18.9 L pail	01-3272-40
20 gal / 75.7 L drum	01-3272-30
55 gal / 208 L drum	01-3272-45



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