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 4351
- 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

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**.