

ZP-4D

Dry Powder Developer

ZYGLO® ZP-4D is a dry powder, Form a developer that is ideal for highly sensitive fluorescent penetrant processes. ZP-4D is applied to oven dried parts following the use of penetrants and forms a thin film on parts that enhances the visibility of ultra-fine discontinuities.

ZP-4D is listed on the QPL SAE AMS 2644 Qualified Product List and is approved for use by Pratt & Whitney.



BENEFITS

- Even, thin developer coverage
- Enhances visibility of ultra-fine discontinuities
- Non-combustible dust

SPECIFICATION COMPLIANCE

- AECL
- AMS 2644
- AMS 2647
- ASME BPVC
- ASTM D129
- 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
- Pratt & Whitney 4356
- QPL SAE AMS 2644
- Rolls Royce RRP 58003 (CSS 232)
- Safran PR5000/In5000

APPLICATIONS

Defect location: open to surface

Ideal for:

- Castings
- Welds and forgings
- Turbine components
- Critical components

Defect examples:

- Cracks
- Seams
- Porosity

USE RECOMMENDATIONS

| | |
|---------------------------------|--|
| NDT Method | Fluorescent Penetrant Testing (Type 1) |
| Form(s) | a |
| Type 1 Penetrant Methods | A, B, C, and D |
| Usage Temperature | 40 to 125°F / 5 to 52°C |
| Storage Temperature | 50 to 86°F / 10 to 30°C |
| Required Equipment | UV light source |

PROPERTIES

| | |
|----------------------|--|
| Particle Size | < 30 μm |
| Density | 15 lb./ft. ³ (240 kg/m ³) |
| NPE-Free | Yes |

INSTRUCTIONS FOR USE

ZP-4D may be applied by dusting, spraying, or dipping. Dipping is the least preferred method of application as some indication scrubbing can result and developer can become contaminated quickly with penetrant. Electrostatic spray application is possible, but care is required to prevent excessive developer build-up which will mask indications. For best results, allow a minimum of ten minutes for developing time before inspecting.

PACKAGING

| Packaging | Country of Origin | Part Number |
|------------------|--------------------------|--------------------|
| 10 lb / 4.53 Kg | USA | 01-3330-69 |
| 20 lb / 9.07 kg | | 01-3330-75 |
| 5 kg tub | UK | 055C084 |

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.