

# Chemical Product Specifications

## Fluorescent Magnetic Particles

### 14A

Fluorescent powder concentrate  
SAE sensitivity: 8 - 9  
Mean particle size: 5 - 12 µm

**Specification compliance:**

- AMS3044
- ASME B & PV Code, Sec V
- ASTM E1444/E1444M
- ASTM E709
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- MIL-STD-2132D
- MIL-STD-271F
- Rolls Royce RRP 58004 (CSS 231)
- SAFRAN In 5300

### MG 410

Fluorescent powder concentrate  
SAE sensitivity: 7  
Mean particle size: 14 - 22 µm

**Specification compliance:**

- ASME B & PV Code, Sec V
- ASTM E709
- MIL-STD-2132D
- MIL-STD-271F
- NAVSEA 250-1500-1
- SAFRAN In 5300

### MG 601

Fluorescent powder concentrate  
SAE sensitivity: 8 - 9  
Mean particle size: 3 - 5 µm

**Specification compliance:**

- AMS3044
- ASME B & PV Code, Sec V
- ASTM E1444/E1444M
- ASTM E709
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- KTA 3905
- MIL-STD-2132D
- MIL-STD-271F

### WB-12

Fluorescent liquid concentrate  
Mean particle size: 5 - 12 µm

**Specification compliance:**

- AMS3044
- ASME B & PV Code, Sec V
- ASTM E1444/E1444M
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- Rolls Royce RRP 58004 (CSS 231)
- SAE AS4792

### WB-655

Fluorescent liquid concentrate  
Mean particle size: 3 - 5 µm

**Specification compliance:**

- AFNOR NF A 09-125
- AMS3044
- ASME B & PV Code, Sec V,
- ASTM E1444/E1444M
- ASTM E709
- DIN 54132
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- MIL-STD-2132D
- MIL-STD-271F
- NAVSEA 250-1500-1
- SAE AS4792

### 14HF

Oil-based fluorescent ink  
SAE sensitivity: 8  
Mean particle size: 5 - 12 µm

**Specification compliance:**

- AMS2641
- AMS3044
- AMS3045
- AMS3046 (Aerosols only)
- ASME B & PV Code, Sec V
- ASTM E709
- ASTM E1444/E1444M
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- MIL-STD-2132D
- Rolls Royce RRP 58004 (CSS 231)
- SAFRAN In 5300
- SNECMA DMR70-520

### 410HF

Oil-based fluorescent ink  
SAE sensitivity: 7  
Mean particle size: 14 - 22 µm

**Specification compliance:**

- AMS2641
- ASME B & PV Code, Sec V
- ASTM E709
- MIL-STD-2132D
- SAFRAN In 5300

## Visible (non-fluorescent) Magnetic Particles

**7HF**

Oil-based black ink  
Mean particle size: 0.2 - 2 µm

**Specification compliance:**

- AMS2641
- AMS3041
- AMS3043 (Aerosols only)
- ASME B & PV Code, Sec V
- ASTM E709
- ASTM E1444/E1444M
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- MIL-STD-2132D

**WB-27**

Black liquid concentrate  
Mean particle size: 0.2 - 2 µm

**Specification compliance:**

- AMS3042
- ASME B & PV Code, Sec V
- ASTM E709
- ASTM E1444/E1444M
- EN ISO 9934-2
- GOST R ISO 9934-2-2011
- MIL-STD-271F
- MIL-STD-2132D
- NAVSEA 250-1500-1
- SAE AS4792

**WCP-2**

White contrast paint

**Specification compliance:**

- ASME B & PV Code, Sec V
- EN ISO 9934-1
- EN ISO 9934-2
- GOST R ISO 9934-2-2011

**1 Grey**

Dry method grey magnetic powder.  
Mean particle size: 80 µm

**Specification compliance:**

- AMS3040
- ASME B & PV Code, Sec V
- ASTM E709
- ASTM E1444/E1444M
- MIL-STD-2132D
- MIL-STD-271F
- NAVSEA T9074-AS-GIB-010/271

**8A Red**

Dry method red magnetic powder.  
Mean particle size: 80 µm

**Specification compliance:**

- AMS3040
- ASME B & PV Code, Sec V
- ASTM E709
- ASTM E1444/E1444M
- MIL-STD-2132D
- MIL-STD-271F
- NAVSEA T9074-AS-GIB-010/271

**MG/MX Carrier II Oil**

Oil-based carrier fluid

**Specification compliance:**

- A-A-59230
- AMS2641
- ASME B & PV Code, Sec V
- ASTM D93
- ASTM E1444/E1444M
- ASTM E709
- MIL-STD-2132D
- NAVSEA T9074-AS-GIB-010/271
- Pratt & Whitney PMC 1887-1

**WA-1**

Water conditioner  
pH: 9.05

**Specification compliance:**

- SAE AS4792

**WA-2**

Anti-foam  
pH: 6.5 - 7.5

N/A

## Fluorescent Penetrants

### ZL-15B

Water-washable fluorescent penetrant  
Sensitivity level: 0.5 (ultra-low)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F

### ZL-19

Water-washable fluorescent penetrant  
Sensitivity level: 1 (low)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4350-2

### ZL-60C

Water-washable fluorescent penetrant  
Sensitivity level: 2 (medium)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E1135
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4351-8
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZL-60D

Water-washable fluorescent penetrant  
Sensitivity level: 2 (medium)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4351-2
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZL-67B

Water-washable fluorescent penetrant  
Sensitivity level: 3 (high)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4360-10
- Rolls Royce RRP 58003 (CSS 232)

### ZL-56

Water-washable fluorescent penetrant  
Sensitivity level: 4 (ultra-high)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F
- Rolls Royce RRP 58003 (CSS 232)

### ZL-2C

Post-emulsifiable fluorescent penetrant  
Sensitivity level: 2 (medium)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4352-2
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZL-27A

Post-emulsifiable fluorescent penetrant  
Sensitivity level: 3 (high)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E1135
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4353-2
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZL-37

Post-emulsifiable fluorescent penetrant  
Sensitivity level: 4 (ultra-high)

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4354-2
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

## Visible Penetrants

### SKL-SP2

Solvent-removable red penetrant

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM D129
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2 (Sensitivity Level 2)
- MIL-STD-2132D
- MIL-STD-271F

### SKL-WP2

Water-washable red penetrant

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM D129
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2 (Sensitivity Level 2)
- MIL-STD-2132D
- MIL-STD-271F

## Cleaner, Emulsifier and Remover

### SKC-S

Solvent cleaner/remover

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM D129
- ASTM 1135
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4366

### ZE-4B

Lipophilic emulsifier.

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F

### ZR-10C

Hydrophilic remover.

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4355-11
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

## Developers

### SKD-S2

Solvent-based developer

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM D129
- ASTM E1135
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-1
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- SAFRAN Pr 5000/In 5000

### ZP-9F

Solvent-based developer

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4357-2
- Propan-2-ol content=10.8%
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZP-4B

Dry powder developer

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- EN ISO 3452-2
- MIL-STD-2132D
- MIL-STD-271F
- Pratt & Whitney PMC 4356-4
- Rolls Royce RRP 58003 (CSS 232)
- SAFRAN Pr 5000/In 5000

### ZP-14A

Water-soluble developer

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F

### ZP-5B

Water-suspendible developer powder concentrate

**Specification compliance:**

- AMS2644
- ASME B & PV Code, Sec V
- ASTM E165/E165M
- ASTM E1417/E1417M
- MIL-STD-2132D
- MIL-STD-271F