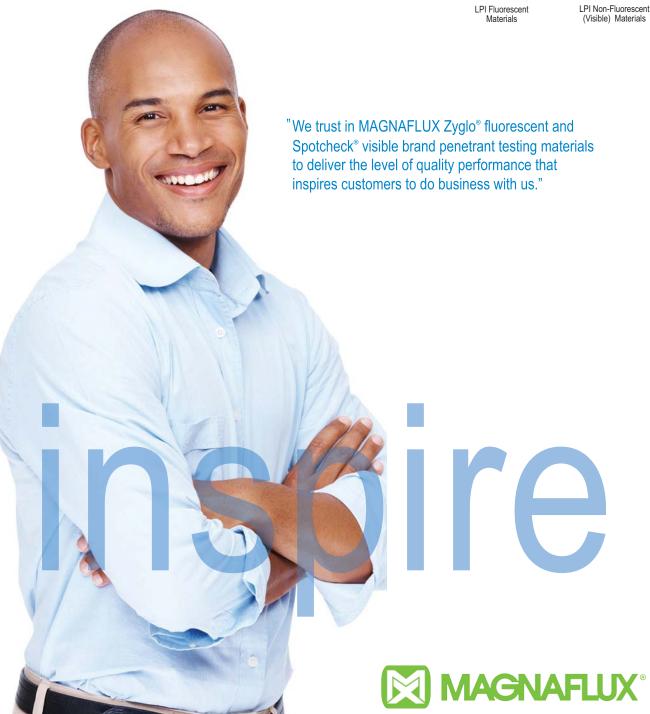
PENETRANT TESTING MATERIALS







Magnaflux® certified fluorescent and visible dye penetrant inspection materials deliver unmatched performance in the detection of small defects and discontinuities in almost any non-porous material.

Delivering Quality

ZYGLO° FLUORESCENT PENETRANTS

POST EMULSIFIABLE FLUORESCENT PENETRANTS

Zyglo[®] ZL-2C Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-2C is designed to be impervious to water to protect it from overwashing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo® ZL-2C fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS-2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271.

Applications: Zyglo® ZL-2C is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, laminations and porosity.

Classification: Type 1, Method B Penetrant when using ZE-4E emulsifier. Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 2 - Normal Sensitivity.

Part Number & Container Size:

01-3123-40 5 Gal. Pail 01-3123-30 20 Gal. Drum 01-3123-45 55 Gal. Drum



PENETRANT TESTING MATERIALS

Magnaflux Zyglo° fluorescent and Spotcheck° visible liquid penetrant testing materials are the industry's most preferred and widely used NDT products employed in the detection of cracks and fine surface discontinuities in ferrous and non-ferrous test materials. Formulated from superior quality dyes and solvents they produce vivid indications in virtually all non-porous materials, and are supported by an expansive line-up of certified penetrants, cleaners, developers, emulsifiers, accessories and equipment.

Zyglo® ZL-27A Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-27A is designed to be impervious to water to protect it from overwashing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo[®] ZL-27A fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-27A is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, laminations and porosity.

Classification: Type 1, Method B Penetrant when using ZE-4E emulsifier. Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 3 - High Sensitivity.

Part Number & Container Size:

01-3187-40 5 Gal. Pail 01-3187-30 20 Gal. Drum 01-3187-45 55 Gal. Drum

Zyglo[®] ZL-37 Post Emulsifiable Fluorescent Penetrant

Zyglo® ZL-37 is designed to be impervious to water to protect it from overwashing and to allow more penetrant to remain in discontinuities for improved detection of small defects. It and other post emulsifiable penetrants require the application of a lipophilic or hydrophilic emulsifier to render them washable with water.

Zyglo[®] ZL-37 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-37 is ideal for titanium turbine components, investment castings, and other high stress critical components where detection of fine, tight discontinuities is required.

Classification: Type 1, Method B Penetrant when using ZE-4E emulsifier. Type 1, Method D Penetrant when using ZR-10B (20%) remover.

Penetrant Sensitivity Level: Level 4 - Ultra High Sensitivity.

Part Number & Container Size:

 01-3188-40
 5 Gal. Pail

 01-3188-30
 20 Gal. Drum

 01-3188-45
 55 Gal. Drum







WATER WASHABLE FLUORESCENT PENETRANTS

Zyglo® ZL-15B Water Washable Fluorescent Penetrant

Zyglo[®] ZL-15B is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

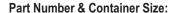
Zyglo® ZL-15B fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-15B exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 1/2 - Very Low Sensitivity.



01-3159-40 5 Gal. Pail 01-3159-30 20 Gal. Drum 01-3159-45 55 Gal. Drum

Zyglo® ZL-19 Water Washable Fluorescent Penetrant

Zyglo[®] ZL-19 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo[®] ZL-19 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-19 exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 1 - Low Sensitivity.

Part Number & Container Size:

01-3263-40 5 Gal. Pail 01-3263-30 20 Gal. Drum 01-3263-45 55 Gal. Drum





Zyglo® ZL-60D Water Washable Fluorescent Penetrant

Zyglo® ZL-60D is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo° ZL-60D fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-60D exhibits excellent rough surface washability and is typically used on castings, forgings, extrusions and rough machined surfaces to find cracks, seams, laps, cold shuts, laminations and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 2 - Medium Sensitivity.

Part Number & Container Size:

01-3272-40 5 Gal. Pail

01-3272-30 20 Gal. Drum

01-3272-45 55 Gal. Drum

Zyglo® ZL-67 Water Washable Fluorescent Penetrant

Zyglo[®] ZL-67 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo[®] ZL-67 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-67 is typically used on critical applications including investment castings, jet engine components, and highly machined surfaces to find cracks, seams and porosity.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 3 - High Sensitivity.

Part Number & Container Size:

01-3274-40 5 Gal. Pail 01-3274-30 20 Gal. Drum

01-3274-45 55 Gal. Drum







Zyglo® ZL-56 Water Washable Fluorescent Penetrant

Zyglo® ZL-56 is a water washable fluorescent penetrant that is safe for use on most engineering and aerospace alloys including aluminum, steel, nickel and titanium.

Zyglo[®] ZL-56 fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm. It possesses a high flash point and meets OSHA requirements for Class III B liquids allowing it to be used in open dip tanks.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing BAC 5423 PSD 6-46 or 8-4, AECL, Boeing PS 21202.

Applications: Zyglo® ZL-56 is typically used on smooth, nonporous, highly machined surfaces to find cracks, seams and scratches on critical parts.

Classification: Type 1, Method A, Water Washable (Non Water Based) Penetrant.

Penetrant Sensitivity Level: Level 4 - Ultra High Sensitivity.

Part Number & Container Size:

01-3267-40 5 Gal. Pail 01-3267-30 20 Gal. Drum 01-3267-45 55 Gal. Drum



WATER BASED FLUORESCENT PENETRANTS

Zyglo® ZL-4C Water Based Penetrant

Zyglo® ZL-4C is a water based penetrant that contains no petroleum based solvents. It fluoresces bright greenish-yellow under an ultraviolet light source with a peak wavelength of 365 nm.

The use of aqueous developers is not recommended with Zyglo® ZL-4C as they tend to wash the penetrant out of discontinuities. Dry powder developer (ZP-4B Dry Powder Developer) is applied after the test surface has been dried.

Specification Compliance: ASME B & PV Code Sec. V, ASTM E165.

Applications: Zyglo® ZL-4C is typically used on plastics and ceramics to find cracks. Zyglo® ZL-4C is also used as a leaker penetrant to detect through leaks. (Use with plastic parts should be tested to confirm Zyglo® ZL-4C compatibility.)

Part Number & Container Size:

01-3137-40 5 Gal. Pail 01-3137-45 55 Gal. Drum



EMULSIFIERS

Zyglo® ZE-4E Lipophilic Emulsifier

Zyglo[®] ZE-4E is a lipophilic emulsifier. It is non-corrosive and can be used in open tank operations due to its low volatility and high flash point.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL.

Applications: Zyglo® ZE-4E is used as a Method B lipophilic emulsifier for Magnaflux post emulsifiable penetrants.

Classification: Method B - Lipophilic Emulsifier.

Part Number & Container Size:

01-3550-40 5 Gal. Pail 01-3550-30 20 Gal. Drum 01-3550-45 55 Gal. Drum

Zyglo[®] ZR-10B Hydrophilic Emulsifier

Zyglo® ZR-10B is a hydrophilic emulsifier. It offers the advantages of minimization of fluorescent background on rough surfaces, minimization of bleed-out from hollow parts, and reduced consumption of expendable materials.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, Honeywell EMS 52309, AMS 2647, General Electric P3TF2, Pratt & Whitney.

Applications: Zyglo[®] ZR-10B is used as a Method D hydrophilic emulsifier for Magnaflux[®] post emulsifiable penetrants.

Classification: Method D - Hydrophilic Emulsifier.

Part Number & Container Size:

01-3620-40 5 Gal. Pail 01-3620-30 20 Gal. Drum 01-3620-45 55 Gal. Drum

DEVELOPERS

Zyglo[®] ZP-4B Dry Powder Developer

Zyglo® ZP-4B is a free flowing, white fluffy powder used as a highly sensitive dry powder developer for Zyglo® Penetrants. When applied, ZP-4B forms a thin film on parts, enhancing indications of ultrafine discontinuities. Its high purity allows it to be used in applications where purity is essential to the testing process.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, Honeywell EMS 52309, AMS 2647, General Electric P3TF2, Pratt & Whitney.







PENETRANT TESTING MATERIALS



Zyglo® ZP-4B Dry Powdered Developer Continued.

Applications: Zyglo® ZP-4B is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form a - Dry Powder Developer.

Part Number & Container Size:

01-3328-69 10 lb. Pail 01-3328-75 20 lb. Container

Zyglo[®] ZP-5B Water Suspendible Developer

Zyglo® ZP-5B Water Suspendible Developer disperses quickly in water to form an opaque white suspension. At higher concentrations, Zyglo® ZP-5B forms an opaque white coating which provides contrasting background for Spotcheck® penetrant indications.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, Boeing BAC 5423 PSD 6-46 or 8-4, MIL-STD-2132, ASTM E1417, Boeing PS 21202, AECL, AMS 2647, General Electric P3TF2.

Applications: Zyglo® ZP-5B is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form c - Water Suspendible Developer.

Part Number & Container Size:

01-3341-81 25 lb. Pail

Zyglo® ZP-9F Developer

Zyglo® ZP-9F is a dispersion of organic particles in isopropyl alcohol and acetone that produces an opaque white coating which provides an excellent contrasting background for Spotcheck® or Zyglo® penetrant indications.

Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, ASTM E1417, Boeing PS 21202, AECL, AMS 2647, NAVSEA 250-1500-1.

Applications: Zyglo® ZP-9F is typically used on automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plant inspections and general metalwork.

Classification: Form d - Non-Aqueous Type 1 Fluorescent (solvent based). Form e - Non-Aqueous Type 2 Visible Dye (solvent based).

Part Number & Container Size:

01-3354-40 5 Gal. Pail





Zyglo[®] ZP-14A Aqueous Soluble Developer

Zyglo® ZP-14A is used as a water soluble developer for enhancing indications formed by Zyglo® penetrants. It produces a uniform white coating when dry which is easily removed in post inspection cleaning by water spray. Once the developer bath has been prepared, no in use agitation is required to maintain developer uniformity.

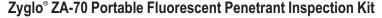
Specification Compliance: AMS 2644, MIL-STD-271, ASME B & PV Code Sec. V, ASTM E165, ASTM E1417, Boeing BAC-5423 PSD 6-46 or 8-4, AMS 2647, General Electric P3TF2, AECL.

Applications: Zyglo® ZP-14A is recommended for use with Zyglo® ZL-2C, ZL-27A, and ZL-37 penetrants.

Classification: Form b - Water Soluble Developer.

Part Number & Container Size:

01-3381-75 20 lb. Pail 01-3381-89 50 lb. Container



The Zyglo® ZA-70 Portable (aerosol) Fluorescent Inspection Kit offers improved sensitivity over our Spotcheck® visible red dye inspection kit.

Each kit contains:

- ZB-100F Ultraviolet Black Light
- 1 Can ZL-27A PE Fluorescent Penetrant
- 1 Can ZP-9F Developer
- 2 Cans SKC-S Cleaner
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case
- Instruction Booklet

Applications: The Zyglo® ZA-70 Portable Fluorescent Inspection Kit is typically used on machined surfaces to find cracks, seams, laps, laminations and porosity.

Part Number:

600047 Kit with 115V ZB-100F UV Black Light







SPOTCHECK® VISIBLE PENETRANTS

SOLVENT REMOVABLE VISIBLE PENETRANT

Spotcheck® SKL-SP2 Solvent Removable Penetrant

Spotcheck® SKL-SP2 is a solvent removable, post emulsifiable, red color contrast penetrant with outstanding penetrating characteristics. It offers maximum reliability in locating surface-open flaws and discontinuities and has been successfully used on non-porous ceramics and other similar materials.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271.

Applications: Spotcheck® SKL-SP2 is typically used on welds, forgings, pressure vessels, castings, general metal work, leak testing, power plants and construction.

Classification: Type 2, Method B, C or D.

Part Number & Container Size:

01-5155-35 1 Gal. (Case of 4)

01-5155-40 5 Gal. Pail 01-5155-45 55 Gal. Drum

SPOTCHECK SKI-SP2 Penefront Framework for Elimobile on Dischem Framework for AND 2014 WANNEG STORY FLAMMARE STORY FLAMMARE

WATER WASHABLE VISIBLE PENETRANT

Spotcheck® SKL-WP2 Water Washable Penetrant

Spotcheck® SKL-WP2 is a water washable, red color contrast penetrant with outstanding penetrating characteristics and discontinuity identification. Water wash removable, it eliminates the need for solvent removers or emulsifiers in the elimination of excess surface penetrant.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, AECL, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKL-WP2 is typically used on welds, forgings, pressure vessels, castings and general metal work.

Classification: Type 2, Method A.

Part Number & Container Size:

01-5190-35 1 Gal. (Case of 4)

01-5190-40 5 Gal. Pail 01-5190-45 55 Gal. Drum



WATER BASED VISIBLE PENETRANT

Spotcheck® SKL-4C Water Based Penetrant

Spotcheck® SKL-4C is a water based, water washable, red dye penetrant used for leak testing and in the inspection of ceramic and chemically sensitive plastic parts. (Use with plastic parts should be tested to confirm Spotcheck® SKL-4C compatibility.)

Spotcheck® SKL-4C indications appear dark purplish-red under visible light and fluorescent orange under UV Black Light to provide dual range inspection flexibility. It can be diluted infinitely with water, but a dilution of 1:1 is generally recommended.

Specification Compliance: ASME B & PV Code Sec. V, ASTM E165.

Applications: Spotcheck® SKL-4C is typically used for leak testing, and ceramic and plastic part inspection.

Part Number & Container Size:

01-5125-40 5 Gal. Pail 01-5125-45 55 Gal. Drum



Spotcheck® SKC-S Cleaner/Remover

Spotcheck® SKC-S is a non-halogenated material used in the liquid penetrant inspection process. It is used on a moist cloth to remove surface penetrant from the inspection area prior to applying developer.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKC-S is typically used to remove excess surface penetrant from the inspection area prior to applying developer.

Classifications: Class 2.

Part Number & Container Size:

01-5750-35 1 Gal. (Case of 4)

01-5750-40 5 Gal. Pail 01-5750-45 55 Gal. Drum







DEVELOPER

Spotcheck® SKD-S2 Non-Halogenated Solvent Developer

Spotcheck® SKD-S2 is a non-halogenated solvent developer that meets major requirements for special alloy and nuclear applications. It is a ready to use suspension of white developing particles in a fast drying solvent. It produces an opaque white coating which provides an excellent contrasting background for penetrant indications.

Specification Compliance: AMS 2644, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD-2132, ASTM E165, MIL-STD-271, Boeing PS 21202, NAVSEA 250-1500-1, AECL, Boeing BAC 5423 PSD 6-46 or 8-4.

Applications: Spotcheck® SKD-S2 is used as a developer for the liquid penetrant inspection process.

Classification: Form d - Non-Aqueous Type 1 Fluorescent (solvent based). Form e - Non-Aqueous Type 2 Visible Dye (solvent based).

Part Number & Container Size:

01-5352-35 1 Gal. (Case of 4) 01-5352-40 5 Gal. Pail

01-5352-45 55 Gal. Drum

SPOTCHECK SKD-S2 Developer Nativation for lotter Discharter Marken Land Control (1997) National Control (1997) Nati

VISIBLE PENETRANT INSPECTION KITS

Spotcheck® SK-416 AND SK-816 Penetrant Inspection Kits

Spotcheck® SK-416 and SK-816 penetrant inspection kits contain everything needed to perform visible red dye liquid penetrant inspections. No UV Black Light is required for inspection.

Specification Compliance: AMS 2644, AECL, ASME B & PV Code Sec. V, ASTM E1417, MIL-STD 2132, ASTM E165, MIL-STD 271.

Applications: Spotcheck® SK-416 and SK-816 penetrant inspection kits are used in the inspection of automobile parts, off-road equipment, farm equipment, welds, castings, forgings, leak testing, pressure vessels, aircraft, marine, construction, maintenance, petroleum pipelines, power plants and general metalwork.

Part Number:

01-5970-48 - Spotcheck® SK-416: Each kit contains:

- 1 Can SKL-SP2 Penetrant
- 1 Can SKD-S2 Developer
- 2 Cans SKC-S Remover
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case

01-5920-48 - Spotcheck® SK-816: Each kit contains:

- 2 Cans SKL-SP2 Penetrant
- 2 Can SKD-S2 Developer
- 4 Cans SKC-S Remover
- Paint Marker
- SCRUBS® Hand Towels
- Plastic Carrying Case



01-5970-48



01-5920-48

SPECIFICATIONS

ZYGLO° PENETRANTS

		Water Washable				Post Emulsifiable			
SPECIFICATIONS	ZL-15B	ZL-19	ZL-60D	ZL-67	ZL-56	ZL-2C	ZL-27A	ZL-37	
NAVSEA T9074-AS-GIB-010/271	Х	Х	Х	Х	Х	Х	Х	Х	
MIL-STD-2132	Х	Х	Х	Х	Х	Х	Х	Х	
AECL	Х	Х	Х	Х	Х	Х	Х	Х	
AMS-2644	Х	Х	Х	Х	Х	Х	Х	Х	
AMS-2647			Х	Х	Х	Х	Х	Х	
ASME B & PV Code, Sec. V	Х	Х	Х	Х	Х	Х	Х	Х	
ASTM E165	Х	Х	Х	Х	Х	Х	Х	Х	
ASTM E1417	Х	Х	Х	Х	Х	Х	Х	Х	
Boeing BAC 5423 PSD 6-46 or 8-4	Х	Х	Х	Х	Х	Х	Х	Х	
Honeywell EMS 52309	Х	Х	Х	Х	Х	Х	Х	Х	
General Electric P3TF2			Х	Х	Х	Х	Х	Х	
Boeing PS 21202	Х	Х	Х	Х	Х	Х	Х	Х	
Pratt & Whitney FPM		Х	Х	Х		Х	Х	Х	

ZYGLO° EMULSIFIERS, REMOVERS and DEVELOPERS

Emul	Emulsifiers & Removers				Developers				
SPECIFICATIONS	ZE-4E	ZR-10B	SKC-S	ZP-4B	ZP-14A	ZP-5B	ZP-9F		
NAVSEA T9074-AS-GIB-010/271	Х	Х	Х	Х	Х	Х	Х		
MIL-STD-2132	Х	Х	Х	Х	Х	Х	Х		
AECL	Х	Х	Х	Х	Х	Х	Х		
AMS-2644	Х	Х	Х	Х	Х	Х	Х		
AMS-2647	Х	Х	Х	Х	Х	Х	Х		
ASME B & PV Code, Sec. V	Х	Х	Х	Х	Х	Х	Х		
ASTM E165	Х	Х	Х	Х	Х	Х	Х		
ASTM E1417	Х	Х	Х	Х	Х	Х	Х		
Boeing BAC 5423 PSD 6-46 or 8-4	Х	Х	Х	Х	Х	Х	Х		
Honeywell EMS 52309	Х	Х	Х	Х	Х	Х	Х		
General Electric P3TF2	Х	Х	Х	Х	Х	Х	Х		
Boeing PS 21202	Х	Х	Х	Х	Х	Х	Х		
Pratt & Whitney FPM		Х		Χ			Х		

PENETRANT TESTING MATERIALS



SPOTCHECK® PENETRANTS, CLEANERS and DEVELOPERS

	Penetrants			Cleaners Developers		
SPECIFICATIONS	SKL-SP2	SKL-WP2	SKL-4C	SKC-S	SKD-S2	ZP-5B
NAVSEA T9074-AS-GIB-010/271	Х	Х		Х	Х	Х
NAVSEA 250-1500-1	Х			Х	Х	
MIL-STD-2132	Х	Х		Х	Х	Х
AECL	Х	Х		Х	Х	Х
AMS-2644	Х	Х		Х	Х	Х
ASME B & PV Code, Sec. V	Х	Х	Х	Х	Х	Х
ASTM E165	Х	Х	Х	Х	Х	Х
ASTM E1417	Х	Х		Х	Х	Х
Boeing BAC 5423 PSD 6-46 or 8-4	Х	Х		Х	Х	Х
Boeing PS 21202	Х			Х	Χ	Х