

2022

# FLUORESCENT

## LEAK DETECTION FOR INDUSTRIAL SYSTEMS

PROFESSIONAL GRADE SOLUTIONS



HYDRAULIC SYSTEMS



PNEUMATIC SYSTEMS



AVIATION SYSTEMS



# FLUORESCENT LEAK DETECTION TOOLS

Working for you **24/7** – Once **IN**, always **ON**



## Step 1

Add dye to the system & let it circulate



## Step 2

Scan system with a Spectroline leak detection lamp and see any leaks glow brightly



Continuously circulating - working for you around the clock, **24/7** to quickly identify any future leaks

Have peace of mind you're using the **ultimate leak detection** and **preventative maintenance solution** in the industry!

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**SPECTROLINE®**  
LEAK DETECTION

## Inventors & Pioneers

For over 66 years, Spectronics Corporation has engineered the highest-quality, premium performance leak detection dyes and products.

As the **inventors of ultraviolet fluorescent leak detection**, we take pride in crafting the most superior leak detection dyes in the industry.

Spectronics Corporation is a family owned company with three generations of experience in delivering award-winning professional service and the industry's most powerful leak detection dyes, additives and lamps.

# INDUSTRIAL SYSTEM APPLICATIONS FOR LEAK DETECTION

Whether it's oil, water or hydraulic fluid, **leaks** impact both the **environment** and **your bottom line**.

**Undetected leaks** can lead to equipment breakdown, lost production time, safety issues, and even fines and legal penalties.

Spectroline® offers a wide range of products designed to **pinpoint** the exact **source of every leak**.

SPI-LTP  
**LeakTracker™ PLUS**  
 UV LED Leak Detection  
 Flashlight



PAGE 13



**WORKS WITH ALL DYES!**

UP TO  
**25 ft** (8m)  
 INSPECTION RANGE

**9h**  
 CONTINUOUS RUNTIME

LASER POINTER

ADJUSTABLE FOCUS LENS

IP68 RATED



AIRCRAFT FUEL SYSTEMS



COMPRESSED AIR/VACUUM SYSTEMS



COOLING TOWERS



DIESEL SYSTEMS



ENGINE LUBRICATION SYSTEMS



HEAVY MACHINERY



HYDRAULIC SYSTEMS



LIQUID HOLDING TANKS



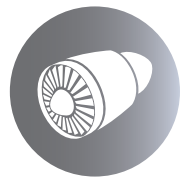
NATURAL GAS LINES



PIPELINES



PNEUMATIC SYSTEMS



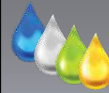
TURBINES/TURBINE ENGINES

**oem**  
GRADE

Premium quality dye, engineered to meet manufacturers' specifications.

FILTERED  
DOWN TO  
**2**  
MICRONS

Fully miscible, high quality, non-particulate and filtered down to 2 microns.



**Several Distinct Colors** - Color-code to diagnose leaks across multiple systems.

**NSF**

OIL-GLO® & WATER-GLO® fluorescent dyes are registered to meet non-contact food-grade processing requirements.



**Detect leaks at a distance.** Leak detection range of 25 feet (8 m) or more.

**24/7**

Remains safely within the system and works 24/7. Identify future leaks quickly.

**\$**

Extends service life. Cost effective and concentrated.



Perfect for use as a preventative maintenance plan. Find leaks, prevent breakdowns.



Technicians can safely search near moving parts.

**PATENTED**  
**PATENTED**  
**PATENTED**

**Exclusive Formula** — from the inventors & most trusted name in fluorescent leak detection.

SPECTROLINE®

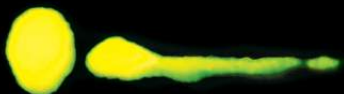
# ULTRA

UV FLUORESCENT  
DYE FORMULATION

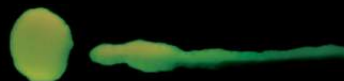


Spectrolin® dyes glow brighter than the competition.

**ULTRA**  
Dye Formula



Competitor  
Dye Formula



Shown under 400 nm light with amber glasses

# ULTRA DYES

## UV FLUORESCENT DYES FOR FLUID SYSTEMS

Ideal for use as part of a diagnostic/preventative maintenance program.



### OIL-GLO® ULTRA UV FLUORESCENT DYES



Oil-based dyes meet NSF category codes HTX2 and HX-2.



For Synthetic and Petroleum-Based Fluid Systems. Available in several distinct colors.

- Works in enclosed circulatory systems where oil-based fluids are used.
- Engineered to work with any host fluid without damaging the fluid's properties or any of the system's components.
- Ideal for lubricant and hydraulic leaks.
- Some applications include: facility maintenance and machinery, mobile hydraulic equipment, stationary hydraulic equipment, oem on-line quality control.



AVAILABLE IN  
MULTIPLE COLORS



	APPLICATION	YELLOW/GREEN	GREEN	YELLOW	WHITE	BLUE	BRIGHT BLUE
<b>Shown Under UV LIGHT 365 nm</b> 	Light Hydraulic Fluid						
	Dark Hydraulic Fluid						
	Compressor Oil						
	Engine Oil						
	Gearbox Oil						
<b>Shown Under VIOLET LIGHT 400 nm</b> 	Light Hydraulic Fluid						
	Dark Hydraulic Fluid						
	Compressor Oil						
	Engine Oil						
	Gearbox Oil						



# GAS-GLO™ ULTRA

## UV FLUORESCENT DYE

For Gasoline and Diesel Fuel Systems. Fluoresces Yellow.

- Perfect for preventive maintenance and to reduce equipment downtime.
- Highly concentrated. Contain more active ingredients per dose than competitors.
- Ideal for off-road, heavy-duty or agricultural equipment. Mining equipment and generators, marine and railroad engines.



Yellow



# WATER-GLO® ULTRA

## UV FLUORESCENT DYES

For Water and Water/Glycol Fluid-Based Systems. Available in two colors.

- Quickly pinpoint the exact source of all water leaks including tiny, evaporated and condensation-covered leaks.
- Works in both static and circulating systems.
- Can be used as a diagnostic tool for testing seams, welds, seals, fittings and flow-rate measuring.
- Ideal for heat transfer fluid systems.
- Some applications include: boilers, heaters/pumps, sprinkler systems, storage tanks.



Blue



Green



Water-based dyes meet NSF category codes G7, GX and HTX2.



# AERO-BRITE™ ULTRA

## UV FLUORESCENT DYE

For Synthetic or Petroleum-Based Aviation Fluid Systems. Fluoresces Green.

- Allows inspection of the entire system under virtually all operating conditions.
- Can be used for commercial and military aircraft fuel & fluid systems.
- Ideal for both in-flight and static testing.
- Systems include: aircraft fuel systems, turbine engines, hydraulic systems, reciprocating engine lubrication systems.



Green



Also Available:  
SP-8609-0100 (NSN:6820-01-386-8609)







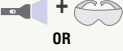



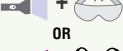




Meets ALL requirements of Military Spec MIL-PRF-81298E, Type III For Aircraft Fuel Systems


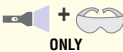


PRODUCT NO./DYE COLOR	APPLICATION	SUGGESTED APPLICATION DILUTION RATIO:	USE WITH
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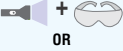


### OIL-GLO® ULTRA

<b>SPI-OGY-16</b> <b>SPI-OGY-32</b> <b>SPI-OGY-1G</b>  Yellow	<b>SPI-OGBB-16</b> <b>SPI-OGBB-32</b> <b>SPI-OGBB-1G</b>  Bright Blue	<b>SYNTHETIC OR PETROLEUM-BASED FLUID SYSTEMS:</b> Light-colored hydraulic fluid Dark/intensely blue hydraulic & lubrication fluids Compressor oil Engine oil Gearbox oil	<b>1 oz (30 ml) per 8 gals (30 L)</b> <b>1 oz (30 ml) per 4 gals (15 L)</b>	 ONLY
<b>SPI-OGW-16</b> <b>SPI-OGW-32</b> <b>SPI-OGW-1G</b>  White	<b>SPI-OGB-16</b> <b>SPI-OGB-32</b> <b>SPI-OGB-1G</b>  Blue			
<b>SPI-OGG-16</b> <b>SPI-OGG-32</b> <b>SPI-OGG-1G</b>	 Green	Light-colored hydraulic fluid Dark/intensely blue hydraulic & lubrication fluids Compressor oil Engine oil Gearbox oil	<b>1 oz (30 ml) per 8 gals (30 L)</b> <b>1 oz (30 ml) per 4 gals (15 L)</b> <b>1 oz (30 ml) per 4 gals (15 L)</b> <b>1 oz (30 ml) per 3 gals (11 L)</b> <b>1 oz (30 ml) per 1 gal (4 L)</b>	 +  OR 
<b>SPI-OGYG-16</b> <b>SPI-OGYG-32</b> <b>SPI-OGYG-1G</b>	 Yellow Green	Light-colored hydraulic fluid Dark/intensely blue hydraulic & lubrication fluids Compressor oil Engine oil Gearbox oil Fuel (gasoline or diesel)	<b>1 oz (30 ml) per 8 gals (30 L)</b> <b>1 oz (30 ml) per 4 gals (15 L)</b> <b>1 oz (30 ml) per 4 gals (15 L)</b> <b>1 oz (30 ml) per 3 gals (11 L)</b> <b>1 oz (30 ml) per 1 gal (4 L)</b> <b>1 oz (30 ml) per 12-18 gals (45-68 L)</b>	 +  OR 


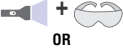


### GAS-GLO™ ULTRA

<b>SPI-GGY-16</b> <b>SPI-GGY-1G</b>  Yellow	<b>GASOLINE AND DIESEL FUEL SYSTEMS</b>	<b>1 oz (30 ml) per 10 gals (38 L)</b>	 ONLY
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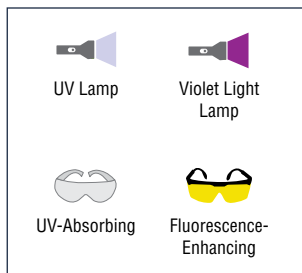
### WATER-GLO® ULTRA

<b>SPI-WGB-16†</b> <b>SPI-WGB-32†</b>  Blue	<b>WATER AND WATER/GLYCOL-BASED FLUID SYSTEMS</b>	<b>1 pt (473 ml) per 500 gals (1,893 L) water</b>	 ONLY
<b>SPI-WGG-16</b> <b>SPI-WGG-32</b> <b>SPI-WGG-1G</b>  Green	<b>WATER AND WATER/GLYCOL-BASED FLUID SYSTEMS</b>	<b>1 pt (473 ml) per 1,000 gals (3,785 L) water</b>	 +  OR 

### AERO-BRITE™ ULTRA

<b>SPI-ABG-16</b> <b>SPI-ABG-32</b> <b>SPI-ABG-1G</b> <b>SP-8609-0100</b> (NSN:6820-01-386-8609)  Green	<b>SYNTHETIC OR PETROLEUM-BASED AVIATION FLUID SYSTEMS:</b> Jet Fuel (static) Jet Fuel (in-flight) Hydraulic Fluid Engine Oil	<b>2 oz (60 ml) per 100 gals (379 L)</b> <b>1.6 oz (47 ml) per 100 gals (379 L)</b> <b>0.25 oz (7 ml) per 4 gals (15 L)</b> <b>0.25 oz (7 ml) per 1 gal (4 L)</b>	 +  OR 
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† Appears clear. Will not discolor host fluid.



Available in different sizes:



<b>A</b>	16 oz (473 ml)
<b>B</b>	32 oz (946 ml)
<b>C</b>	1 gal (4 L)
<b>D</b>	5 gal (19 L)
<b>E</b>	55 gal (209 L)

# LEAK DETECTION KITS



FOR ALL OIL-BASED FLUID SYSTEMS

VIOLET  
LIGHT LED



## OIL-GLO® ULTRA COMPLETE Fluorescent Leak Detection Kit

Great entry kit specifically designed to find leaks in oil-based fluid systems.

SPI-VLOGYG



- SPI-VL Violet light LED, battery operated leak detection flashlight
- SPI-0GYG-8 Patented 8 oz (237 ml) twin-neck bottle of concentrated oil dye (glows yellow-green). Treats up to 64 gallons (242 L) of fluid.



UV LED



## LeakTracker™ COMPLETE Fluorescent Leak Detection Kit

Ideal for all industrial fluid system applications. SPI-LT UV LED light works with all Spectrolin® dyes.

SPI-LTOGYG



- SPI-LT LeakTracker™ high-intensity, battery operated UV LED leak detection flashlight
- SPI-0GYG-8 Patented 8 oz (237 ml) twin-neck bottle of concentrated oil dye (glows yellow-green). Treats up to 64 gallons (242 L) of fluid.







## FOR WATER OR WATER/GLYCOL-BASED FLUID SYSTEMS

VIOLET LIGHT LED



### WATER-GLO® ULTRA COMPLETE

Fluorescent Leak Detection Kit

The most complete leak detection kit for water and water/glycol-based fluid systems.

SPI-VLWGG



- **SPI-VL** Violet light LED, battery operated leak detection flashlight
- **SPI-WGG-8** Patented 8 oz (237 ml) twin-neck bottle of concentrated water dye (glows green). Treats up to 500 gallons (1,893 L) of fluid.



## FLUORESCENT DYE CLEANER

### GLO-AWAY™ PLUS

Fluorescent Dye Cleaner

RP-GA-2

- 2 oz (60 ml) spray bottle
- New formulation that works to dissolve fluorescent dye from the leak site.
- Requires less application & less time removing left over dye.

### CONCENTRATED FORMULA

Stronger formula makes it easier to remove the toughest dye stains.



OTHER DYE CLEANERS




















GLO-AWAY™ PLUS



# LAMPS

## LAMP COMPARISON CHART

All Spectroline cordless leak detection lamps feature: A compact design for getting into tight spaces, a durable lamp body and powerful, high-intensity LEDs. Specifically engineered for optimal performance when used with Spectroline fluorescent dyes. These lamps can stand up to years of heavy use!

	Part Number Trade Name	Bulb Type	Leak Detection Range	Runtime	Power	OIL-GLO® Ultra Dyes	WATER-GLO® Ultra Dyes	GAS-GLO™ Ultra Dye	AERO-BRITE™ Ultra Dye
	<b>SPI-VL-CS</b> Spectroline® Violet Light LED	400 nm Violet LED	25' (8 m) 	5 hours (Continuous)	3 "AAA" Batteries			N/A	
	<b>SPI-LT</b> LeakTracker™	365 nm UV LED	20' (6 m) 	4 hours (Continuous)	3 "AAA" Batteries				
	<b>SPI-LTP</b> LeakTracker™ PLUS	365 nm UV LED	25' (8 m) 	9 hours (Continuous)	3 "C" Batteries				





## ECONOMICAL BATTERY-OPERATED VIOLET LIGHT LED



UP TO  
**25 ft** (8 m)  
Inspection  
Range



**3x**  
AAA  
Batteries  
Included



**5h**  
Runtime



Fluorescence  
Enhancing  
(Optional)

Full-color  
clamshell  
packaging



### SPECTROLINE®

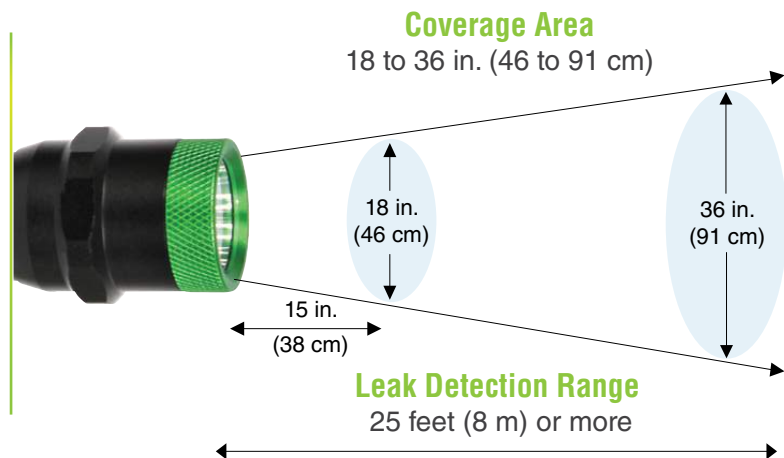
Violet LED Leak Detection Flashlight

Battery Operated, Violet Light LED Leak Detection Flashlight that is both economical and powerful. Features a pre-focused beam to optimize fluorescent response, anti-roll cuff, a 5-hour runtime and an inspection range up to 25 ft.

#### SPI-VL-CS

#### INCLUDES:

- 3 AAA batteries
- Anti-roll cuff
- Fluorescence enhancing glasses



#### SPECIFICATIONS

**Light Source:** Violet Light LED

**Lamp Style:** Cordless Flashlight

**Lamp Head Diameter:** 1.25 in (3.2 cm)

**Length:** 5.9 in (15 cm)

**Weight:** 4.8 oz (0.14 kg)

**Power Source:** Three "AAA" batteries

**Run Time:** 5 hours (continuous)





**COST EFFECTIVE  
BATTERY-OPERATED  
UNIVERSAL UV LED**



**UP TO  
20ft (6m)**

Inspection  
Range

**3x  
AAA**

Batteries  
Included

**4h**

Runtime



UV-Absorbing  
Glasses



## LeakTracker™

UV LED Leak Detection Flashlight

Battery Operated, UV LED Leak Detection Flashlight that works with all industrial fluid systems and Spectroline® dyes. Operates with pure UV light for a superior fluorescent dye response. Features a 20 ft inspection range and 4-hour runtime.

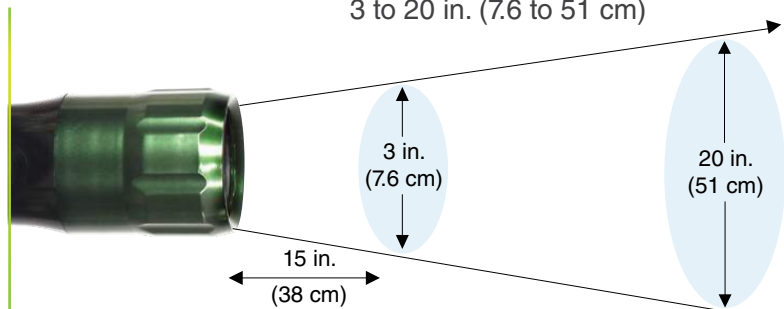
### SPI-LT

#### INCLUDES:

- 3 AAA batteries
- UV-absorbing glasses
- Belt holster
- Lanyard
- Small carrying case

#### Coverage Area

3 to 20 in. (7.6 to 51 cm)



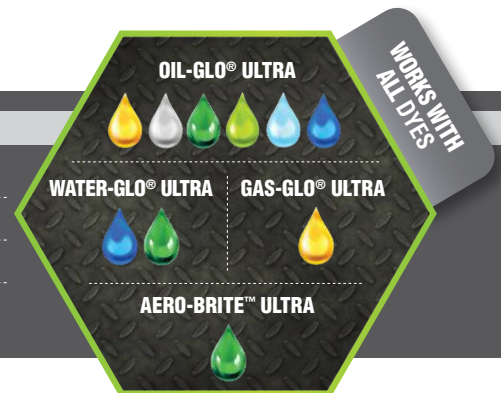
#### Leak Detection Range

20 feet (6 m) or more

#### SPECIFICATIONS

**Light Source:** UV LED  
**Lamp Style:** Cordless Flashlight  
**Lamp Head Diameter:** 1 in (2.54 cm)  
**Length:** 5.5 in (14 cm)

**Weight:** 4.8 oz (0.14 kg)  
**Power Source:** Three "AAA" batteries  
**Run Time:** 4 hours (continuous)





**NEW!**

**PREMIUM VALUE  
BATTERY-OPERATED  
UNIVERSAL UV LED**



**UP TO  
25 ft (8 m)**  
Inspection  
Range

**3x  
C**  
Batteries  
Included

**9h**  
Runtime



UV-Absorbing  
Glasses



IP68  
Rating



## LeakTracker™ PLUS

UV LED Leak Detection Flashlight

The LeakTracker™ PLUS is a high-quality, durable cordless inspection flashlight with advanced features like an adjustable focus, a longer runtime and laser pointer for extreme accuracy in pinpointing leaks. Rechargeable version coming soon!

### SPI-LTP

#### FEATURES:

- Adjustable Focus
- Rugged Anodized Aluminium Lamp Body
- Laser Pointer (Class II Laser)
- IP 68 Rating

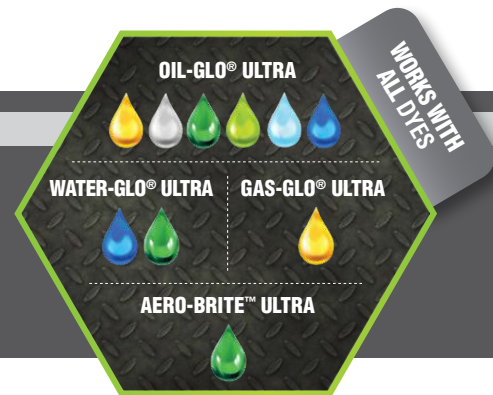


#### Adjustable Focus Lens:

2 in 1: Narrow focus for a powerful beam of light to fluoresce the smallest leaks. Wide focus for larger scans and to reduce reflections.

#### SPECIFICATIONS

Light Source:	UV LED	Weight:	4.6 oz (0.13 kg)
Lamp Style:	Cordless Flashlight	Weight w/Battery:	1.10 lbs (0.50 kg)
Lamp Head Diameter:	1.62 in (4.11 cm)	Power Source:	3 "C" Batteries
Length:	8.80 in (22.35 cm)	Run Time:	9 hours (continuous)



# DIAGNOSTIC



HEAR WHAT YOU NEED TO HEAR!



AUTOMATIC GAIN CONTROL

## Marksman™ II ULTRASONIC DIAGNOSTIC TOOL

Features advanced heterodyne circuitry and “Sound Signature Technology” to convert and amplify inaudible ultrasonic sounds into audible “natural” sounds. Provides quick diagnosis of leaks and defects before they become major breakdowns!

### SPI-MDT



- 5-LED signal-intensity indicator and audible alarm easily locate the exact problem source
- Internal Noise Control (INC) ensures tool is unaffected by ambient noise. Ideal for use in extremely noisy environments
- Self-adjusting Automatic Gain Control (AGC) circuitry enhances sensitivity and simplifies operation
- Laser pointer to help pinpoint the source of pressurized leaks
- Adjustable touch-control sensitivity pad and power switch
- Quickly detects compressed air, natural gas, propane tank, vacuum, steam, refrigerant and other pressurized leaks
- Finds gear and bearing wear in internal components and electric motors
- Precision-engineered air probe helps isolate leak sources in cramped areas
- Unique ultrasonic emitter helps locate faulty seals, gaskets and weather stripping in doors, windows, ductwork and other non-pressurized enclosures

INCLUDES BOTH  
HOLLOW AND SOLID  
PROBE EXTENSIONS

LASER POINTER

#### COMES COMPLETE WITH:

- Ultrasonic Receiver
- Ultrasonic Emitter
- Air Probe
- Contact Probe
- Noise-canceling Headphones
- Carrying Case
- Batteries Included

#### IDEAL FOR DETECTING:

- Compressed Air Leaks
- Natural Gas and Propane Leaks
- Pressure and Vacuum Leaks
- Gear and Bearing Wear
- Electrical Discharge
- Gas and Liquid Turbulence
- Refrigerant Leaks
- Seal and Gas Integrity
- ... and many more!

# Q&A

GOT QUESTIONS?

UV MAN  
HAS  
ANSWERS!



## How do I use **fluorescent** leak detection dye?

Add our patented dye to the suspect system, then let the dye circulate. Once the dye has permeated the system, scan for leaks with one of our high-intensity leak detection flashlights.

All leak sites will glow brightly with escaping fluorescent dye.

## Are the dyes **harmful** to the system in any way?

Spectroline® fluorescent leak detection dye is engineered to be fully-miscible. It is, by definition, a non-particulate and is filtered down to 2 microns.

This ensures the fluorescent dye doesn't change the precise characteristics of the host fluid. Lubricity, viscosity, and other properties of the original host fluid are completely unaffected when dye is added to the system.

Spectroline® fluorescent dyes are also NSF-certified, meaning they are not harmful to the environment. whatsoever.

## Why is **dye concentration** important?

Dye fluorescence is dependent on the ratio of fluorescent material to carrier oil. Poor performing dyes typically have low levels of fluorescent material. Simply put, poor dyes lack the concentration necessary to provide an effective fluorescent response.

Spectroline® dyes are concentrated and able to fluoresce all leak areas brightly. This means Spectroline® dyes are more economical because less dye is used per application.

## How long does it take to find a **leak**?

Depending on the size of the systems, it may take minutes to a few hours for the dye to circulate completely.

For preventative maintenance, add Spectroline® dye long before you have a problem.

A technician can perform an inspection within a matter of seconds if the dye has already had time to fully circulate.

Works effectively in any closed loop or circulatory system.

## Which **fluorescent dye color** do I select?

Spectroline® offers a variety of dye colors that are engineered to best suit specific host fluids and applications.

Use different colors to detect leaks across multiple systems. Color-code each system to ensure leaks are found quickly and with immediate certainty.

## Why is **Spectroline®** trusted by more OEMs than any other brand?

Spectronics Corporation invented fluorescent leak detection in 1955. Today, we are the world's leading manufacturer of ultraviolet equipment and fluorescent leak detection dye.

Our OEM-grade fluorescent dyes are co-solvent free, NSF certified, and can safely remain indefinitely within any oil-based or water-based fluid system.



# SPECTROLINE®

## LEAK DETECTION

TRUSTED BY INDUSTRY LEADERS



# MOBILE HYDRAULIC EQUIPMENT

Construction/Paving  
Agricultural  
Hydraulic Lifts



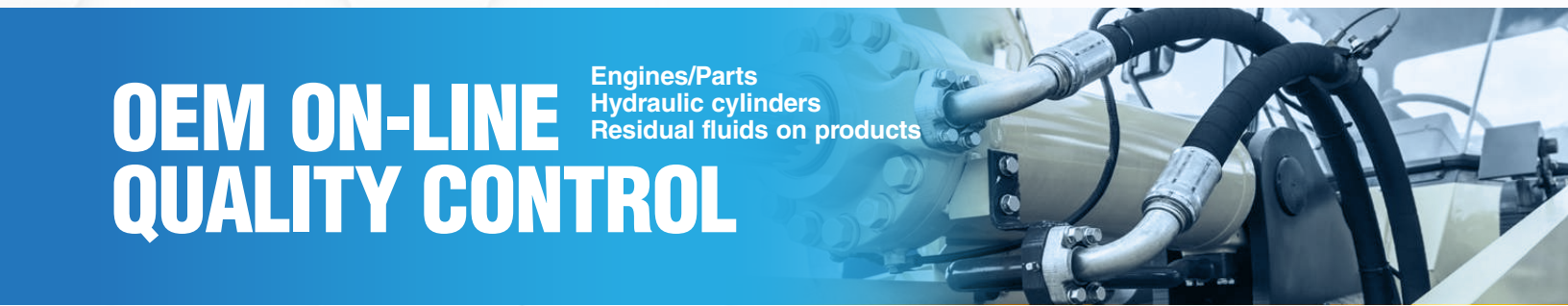
# FACILITY MAINTENANCE

Injection Molding  
Stamping  
Power Plants



# STATIONARY HYDRAULIC EQUIPMENT

Mining  
Drillers  
Power Packs



# OEM ON-LINE QUALITY CONTROL

Engines/Parts  
Hydraulic cylinders  
Residual fluids on products



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