

# FLUORESCCENT

## LEAK DETECTION PRODUCTS AND SPECIALTY TOOLS



INDUSTRIAL



SAFETY

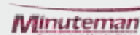


AVIATION



MARINE

TRUSTED BY THESE INDUSTRY LEADERS:



ISO 9001:2008  
CERTIFIED COMPANY

SPECTRONICS  
CORPORATION



## The Most Effective Method of Finding **Fluid Leaks** in an Industrial Environment

Works effectively in any enclosed circulatory system where fluids are used for lubrication, hydraulics, cooling control or hydrostatic pressure testing. Fluorescent dyes also can reveal leaks in static systems that can be pressurized or agitated.

### CONTENTS:

#### INDUSTRIAL PRODUCTS

|                             |   |
|-----------------------------|---|
| Introduction to Dyes        | 4 |
| Dyes for Circulating Fluids | 5 |

#### Cordless LED Leak Detection Lamps:

|                        |     |
|------------------------|-----|
| UV LED Lamps           | 6-7 |
| Violet Light LED Lamps | 8-9 |

#### Complete LED Leak Detection Kits

|                                 |    |
|---------------------------------|----|
| UV LED Lamp Leak Detection Kits | 10 |
|                                 | 11 |

#### Oil Sample Test Kits

|                 |    |
|-----------------|----|
| Specialty Tools | 12 |
|                 | 13 |

#### INDUSTRIAL SAFETY PRODUCTS

|                     |       |
|---------------------|-------|
| FluidSafe™ Additive | 14-16 |
|---------------------|-------|

#### Leak Detection Products & Kits

|                                      |    |
|--------------------------------------|----|
| M-GLO™ Additive & Leak Detection Kit | 16 |
|                                      | 17 |

#### AVIATION PRODUCTS

|                                |       |
|--------------------------------|-------|
| AERO-BRITE™ Leak Detection Dye | 18-19 |
|--------------------------------|-------|

#### Aviation Leak Detection Kits

|                                       |    |
|---------------------------------------|----|
| Ultrasonic Diagnostic Specialty Tools | 20 |
|                                       | 21 |

#### MARINE PRODUCTS

|                           |       |
|---------------------------|-------|
| Marine Leak Detection Kit | 22-23 |
|---------------------------|-------|

## Spectroline Advantage

- ✓ Fast, easy and accurate
- ✓ Finds all leaks — the first time, every time
- ✓ Economical
- ✓ Reduces labor costs
- ✓ Perfect for preventive maintenance
- ✓ Environmentally friendly
- ✓ Remains safely in system
- ✓ Improves working conditions
- ✓ Decreases equipment downtime
- ✓ Increases efficiency of machinery operation

## FLUORESCENT LEAK DETECTION: HOW IT WORKS



### STEP 1

Add a small amount of dye to system and let it circulate...

(The dye/fluid mixture escapes with the host fluid wherever there is a leak)



### STEP 2

Scan system with a Spectroline® leak detection lamp and see all leaks glow brilliantly!



SCAN QR CODE  
TO VIEW VIDEO



# INDUSTRIAL PRODUCTS

Leak detection technology that will save you money on costly leaks.

**PAGES 3-13**



HYDRAULIC  
SYSTEMS



PIPELINES



TURBINES



VACUUM  
SYSTEMS



LIQUID  
HOLDING TANKS



COOLING  
TOWERS



COMPRESSED  
AIR LINES



NATURAL GAS  
LINES



PNEUMATIC  
SYSTEMS




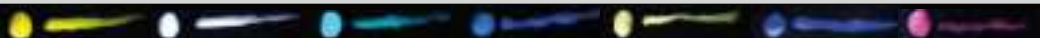





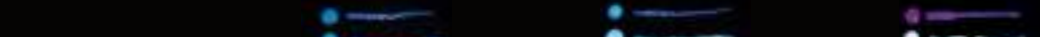
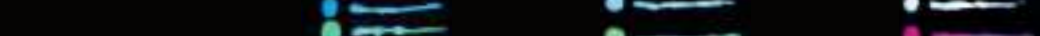
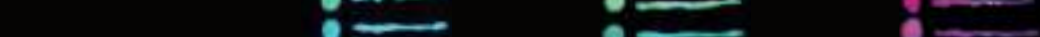
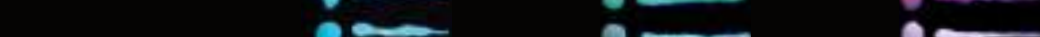

PROPANE  
TANKS



## INTRODUCTION TO DYES



### OIL-GLO® SERIES FLUORESCENT DYE COLOR CHART:

|  | APPLICATION           | OIL-GLO® 20  | OIL-GLO® 30 | OIL-GLO® 33 | OIL-GLO® 40 | OIL-GLO® 44 | OIL-GLO® 45 | OIL-GLO® 50 |
|--|-----------------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Shown Under<br><b>365 nm</b><br>UV LIGHT<br>     | Light Hydraulic Fluid |  |             |             |             |             |             |             |
|  | Dark Hydraulic Fluid  |  |             |             |             |             |             |             |
|  | Compressor Oil        |  |             |             |             |             |             |             |
|  | Engine Oil            |  |             |             |             |             |             |             |
|  | Gearbox Oil           |  |             |             |             |             |             |             |
| Shown Under<br><b>400 nm</b><br>VIOLET LIGHT<br> | Light Hydraulic Fluid |  |             |             |             |             |             |             |
|  | Dark Hydraulic Fluid  |  |             |             |             |             |             |             |
|  | Compressor Oil        |  |             |             |             |             |             |             |
|  | Engine Oil            |  |             |             |             |             |             |             |
|  | Gearbox Oil           |  |             |             |             |             |             |             |

Refer to the chart on right page for detailed information about our most popular dyes.



# DYES FOR CIRCULATING FLUIDS



**Note:** All OIL-GLO® and WATER-GLO® fluorescent dyes are NSF Certified and registered to meet food-grade processing requirements.

**OIL-GLO®** oil-based dyes meet category codes HTX-2 and HX-2.

**WATER-GLO®** water-based dyes meet category codes G7, GX and HTX-2.



| PRODUCT NO.   | DYE COLOR                   |  | APPLICATION  | SUGGESTED APPLICATION DILUTION RATIO:   | % DYE TO SYSTEM FLUID:                                    | USE WITH     |
|---|-----------------------------|--|--|---|---|--------------|
| OIL-GLO® 20/6*<br>OIL-GLO® 20-8<br>OIL-GLO® 20-P<br>OIL-GLO® 20-G | <br>Fluoresces Yellow       |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>ONLY    |
| OIL-GLO® 30/6*<br>OIL-GLO® 30-8<br>OIL-GLO® 30-P<br>OIL-GLO® 30-G | <br>Fluoresces White        |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>ONLY    |
| OIL-GLO® 33/6*<br>OIL-GLO® 33-8<br>OIL-GLO® 33-P<br>OIL-GLO® 33-G | <br>Fluoresces Green        |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>OR<br>+ |
| OIL-GLO® 40/6*<br>OIL-GLO® 40-8<br>OIL-GLO® 40-P<br>OIL-GLO® 40-G | <br>Fluoresces Bright Blue  |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>ONLY    |
| OIL-GLO® 44/6*<br>OIL-GLO® 44-8<br>OIL-GLO® 44-P<br>OIL-GLO® 44-G | <br>Fluoresces Yellow Green |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil<br>Fuel (gasoline or diesel) | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)<br>1 oz (30 ml) per 12-18 gals (45-68 L) | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%<br>0.04 - 0.07% | +<br>OR<br>+ |
| OIL-GLO® 45/6*<br>OIL-GLO® 45-8<br>OIL-GLO® 45-P<br>OIL-GLO® 45-G | <br>Fluoresces Blue†        |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>ONLY    |
| OIL-GLO® 50/6*<br>OIL-GLO® 50-8<br>OIL-GLO® 50-P<br>OIL-GLO® 50-G | <br>Fluoresces Red          |  | <b>SYNTHETIC- OR PETROLEUM-BASED FLUID SYSTEMS:</b><br>Light-colored hydraulic fluid<br>Dark/intensely blue hydraulic & lubrication fluids<br>Compressor oil<br>Engine oil<br>Gearbox oil                              | 1 oz (30 ml) per 8 gals (30 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 4 gals (15 L)<br>1 oz (30 ml) per 3 gals (11 L)<br>1 oz (30 ml) per 1 gal (4 L)  | 0.10%<br>0.20%<br>0.20%<br>0.26%<br>0.78%                 | +<br>OR<br>+ |
| GAS-GLO® 32**<br>GAS-GLO® 32-P<br>GAS-GLO® 32-G                   | <br>Fluoresces Yellow       |  | <b>GASOLINE AND DIESEL FUEL SYSTEMS</b>  | 1 oz (30 ml) per 10 gals (38 L)   | 0.08%   | +<br>ONLY    |
| WATER-GLO® 801-P<br>WATER-GLO® 801-G                              | <br>Fluoresces Blue†        |  | <b>WATER- AND WATER/GLYCOL-BASED FLUID SYSTEMS</b>   | 1 pt (473 ml) per 500 gals (1,900 L) water  | 0.03%   | +<br>ONLY    |
| WATER-GLO® 802-P<br>WATER-GLO® 802-G                              | <br>Fluoresces Green        |  | <b>WORKS IN BOTH STATIC AND CIRCULATING SYSTEMS</b>  | 1 pt (473 ml) per 1,000 gals (3,800 L) water  | 0.01%   | +<br>OR<br>+ |

NOTE: The suffix "8" denotes an 8 oz (237 ml) bottle; suffix "P" denotes a 16 oz (473 ml) bottle; suffix "G" denotes a 1 gal (4 L) pail. Other sizes also available.

The dilution ratios of Spectrolin® fluorescent dyes to the host fluids shown above are only guidelines. These ratios can be increased or decreased depending on the fluorescent response required and the ambient lighting conditions. A simple way to check for proper fluorescence is to remove a small amount of host fluid from the system and add the suggested amount of dye to it. Then shine a Spectrolin® leak detection lamp on this sample mixture and check for a bright fluorescent response.

\* Package of (6) 1 oz (30 ml) bottles \*\* Case of (24) 1 oz (30 ml) bottles † Appears clear. Will not discolor host fluid.



## CORDLESS LED LEAK DETECTION LAMPS

### ALL OUR CORDLESS LEAK DETECTION LAMPS FEATURE:

A compact design for getting into tight spaces, a heavy-duty, durable lamp body and powerful, high-intensity LEDs.



#### OPTI-LUX™ 365

Rechargeable, UV LED Leak Detection Flashlight

P/N: OLX-365

- Twice as powerful as most corded, high-intensity UV lamps
- Works with all systems and dyes, including difficult-to-fluoresce yellow, white and blue dyes — even in dirty fluids
- 4 hours of continuous inspection between charges
- Includes battery charging cradle with AC and DC cord sets, (1) spare rechargeable lithium-ion battery, UV-absorbing glasses, belt holster, lanyard and small carrying case



**Li-ION**  
RECHARGEABLE

**25'** Range  
(8 m)

**UV  
LED**

**4** hour  
RUNTIME





## LeakTracker™ Battery Operated, UV LED Leak Detection Flashlight

P/N: LT-300

- More powerful than most corded, high-intensity UV lamps
- Works with all oil- and water-based fluorescent dyes, including difficult-to-fluoresce yellow, white and blue dyes — even in dirty fluids
- 4 hours of continuous inspection between charges
- Includes 3 AAA batteries, UV-absorbing glasses, belt holster, lanyard and small carrying case



3  
AAA  
BATTERIES

20' Range  
(6 m)

UV  
LED

4  
hour  
RUNTIME



## CORDLESS LED LEAK DETECTION LAMPS



### OPTI-LUX™ 400

Rechargeable, Violet Light LED Leak Detection Flashlight

P/N: **OLX-400I**

- Power comparable to high-intensity 150W lamps
- 4 hours of continuous inspection between charges
- Includes battery charging cradle with AC and DC cord sets, fluorescence-enhancing glasses and lanyard



NOTE: For most applications, our 400 Series lamps do not require fluorescence-enhancing glasses.



**Li-  
ION**  
RECHARGEABLE

**25'** Range  
(8 m)

**VIOLET  
LIGHT  
LED**

**4 hour  
RUNTIME**





## OPTIMAX™ 400

Battery Operated, Violet Light LED Leak Detection Flashlight

P/N: OPX-400ICS

- Provides optimal fluorescent dye response and contrast
- Power comparable to high-intensity 150W lamps
- 5 hours of continuous inspection between charges
- Includes 3 AAA batteries, fluorescence-enhancing glasses, belt holster and lanyard



NOTE: For most applications, our 400 Series lamps do not require fluorescence-enhancing glasses.



**3**  
AAA  
BATTERIES

**25'** Range  
(8 m)

**VIOLET  
LIGHT  
LED**

**5** hour  
RUNTIME



## COMPLETE LED LEAK DETECTION KITS

### FOR **SMALL-MEDIUM** SIZED SYSTEMS



OIL-BASED  
SYSTEM



FLUORESCES  
YELLOW/  
GREEN

### Complete LeakTracker™ Kit

Ideal for all industrial fluid system applications.

P/N: LTK-441

- LT-300 LeakTracker™ high-intensity, battery operated LED leak detection flashlight
- 8 oz (237 ml) twin-neck bottle of patented OIL-GLO® 44 concentrated oil dye. Treats up to 64 gallons (242 L) of fluid.



3  
AAA  
BATTERIES



OIL-BASED  
SYSTEM



FLUORESCES  
YELLOW/  
GREEN

### Complete OPTIMAX™ 400 Kit

Specially designed for finding leaks in oil-based fluid systems.

P/N: OPK-441

- OPX-400I OPTIMAX™ 400 high-intensity, battery operated LED leak detection flashlight
- 8 oz (237 ml) twin-neck bottle of patented OIL-GLO® 44 concentrated oil dye. Treats up to 64 gallons (242 L) of fluid.



3  
AAA  
BATTERIES



### FOR **LARGE** SIZED SYSTEMS



OIL-BASED  
SYSTEM



FLUORESCES  
YELLOW/  
GREEN

### Complete OPTI-LUX™ 400 Kit

The most powerful kit for finding leaks in oil-based fluid systems.

P/N: OLK-444

- OLX-400I OPTI-LUX™ 400 high-intensity, rechargeable LED leak detection flashlight
- 16 oz (473 ml) twin-neck bottle of patented OIL-GLO® 44 concentrated oil dye. Treats up to 128 gallons (484 L) of fluid.



Li-  
ION  
RECHARGEABLE



WATER-BASED  
SYSTEM



FLUORESCES  
GREEN

### Complete OPTI-LUX™ 400 Kit

The most complete kit for finding leaks in water- and water/glycol-based systems.

P/N: OLK-402

- OLX-400I OPTI-LUX™ 400 high-intensity, rechargeable LED leak detection flashlight
- 16 oz (473 ml) twin-neck bottle of WATER-GLO® 802 concentrated water dye. Treats up to 1000 gallons (3,800 L) of water.



Li-  
ION  
RECHARGEABLE







## EagleEye™ Hands-Free UV/White Light LED Kit

Features the lightweight, cool-running EE-365 EagleEye™ LED lamp, with two ultra-high intensity UV LEDs and a three-LED white light assembly.

P/N: EK-365

- Power comparable to high-intensity 100W lamps
- Adjustable strap allows lamp to be worn on a hard hat or directly on the head for complete hands-free operation
- Works with **all** oil- and water-based fluorescent dyes. Especially effective on difficult-to-fluoresce yellow, white and blue dyes — even in dirty fluids.
- Built-in fan keeps LEDs cool to maintain optimum intensity during extended use
- Lithium-ion battery provides up to 90 minutes of continuous inspection between charges. Two spare batteries included.

12' Range  
(4 m)

UV  
LED

WHITE  
LIGHT  
LED

Li-  
ION  
RECHARGEABLE

BATTERY  
CHARGERS WITH  
AC/DC CORDS

UV-ABSORBING  
GLASSES

PADDED  
CARRYING CASE



### Kit Includes:

EE-365 EagleEye™ UV lamp with splash guard, integral particulate filter, rechargeable lithium-ion battery, lanyard, (2) spare splash guards, head strap, (2) spare batteries, battery charging cradle with AC and DC cord sets UV-absorbing spectacles and a soft carrying case.

## TRITAN™ 365 UV LED Lamp Kit

Ultra-high intensity broad-beam UV LED lamp.

P/N: TRI-365HB

- **Three** UV LEDs and one white light LED
- **Instant-on** operation; no warm-up time required
- Broad-beam design provides wider coverage area than conventional UV leak detection lamps
- Rubber bumper with Borofloat® glass lens protects LEDs from damage
- Built-in fans keep LEDs cool to maintain optimum output during extended use

20' Range  
(6 m)

UV  
LED

WHITE  
LIGHT  
LED

UV-ABSORBING  
GLASSES

PADDED  
CARRYING CASE



Also Available

## TRITAN™ 365 AC/DC UV LED Lamp Kit

P/N: TRI-365MHB

- Features the battery-operated TRITAN™ 365 UV LED lamp

BATTERY PACK

SMART AC/DC  
CHARGERS

AC/DC  
ADAPTER





## OIL SAMPLE TEST KITS

**SAMPLE TEST KITS HELP YOU SELECT THE CORRECT LEAK DETECTION DYE AND LAMP TO MEET YOUR **SPECIFIC REQUIREMENTS**.**

### Test Your Oil Samples Yourself, Right in the Field!

These two convenient kits contain everything needed to collect samples and do a fast analysis to determine the right OIL-GLO® dye, dilution ratio and Spectroline® leak detection lamp.



#### Field Dye Dilution Ratio Kit

P/N: **FDK-100**

Includes (2) 0.25 oz (7 ml) bottles of each sample dye:

- OIL-GLO® 30 (White)
- OIL-GLO® 33 (Green)
- OIL-GLO® 40 (Bright Blue)
- OIL-GLO® 44 (Yellow/Green)



#### Field Dye Dilution Ratio Kit

P/N: **FDK-200**

Includes (2) 0.25 oz (7 ml) bottles of each sample dye:

- OIL-GLO® 20 (Yellow)
- OIL-GLO® 45 (Blue)
- OIL-GLO® 50 (Red)

Each kit comes complete with a color chart, instructions, black evaluation plate, applicators and (2) 8 oz (237 ml) twin-neck mixing bottles.

### Mail-In Kit to Get an Expert Analysis Directly From Spectroline®

Let Spectroline® test your oil sample and provide a report with a dye, dilution ratio and lamp recommendation.

#### Dye Selection/Oil Sample Analysis Kit

Contains everything needed to collect an oil sample and send it to us for a professional analysis.

P/N: **AK-1000**

Makes sample collection and shipping fast and easy! Upon receipt, our expert chemists will test your oil sample and provide a report with dye, dilution ratio and leak detection lamp recommendations.



#### Kit Includes:

Oil sample analysis form, 8 oz (237 ml) sample bottle with lid, absorbent cloth, plastic bag with tie, pressure-sensitive tape, box-sealing tape, shipping label, packaging instructions and cardboard shipping box.





HEAR WHAT  
YOU NEED TO  
HEAR!

# Marksman™ II

## ULTRASONIC DIAGNOSTIC TOOL

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

SCAN QR CODE  
TO LEARN MORE



P/N: MDE-2000LNC

- 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
- Comes complete with ultrasonic receiver, ultrasonic emitter, air probe, contact probe, noise-cancelling headphones, (2) D cell batteries and carrying case

## PRO-Chek CG™

### Combustible Gas Leak Detector

Ideal for finding leaks in natural gas systems, propane tanks, pipelines, regulators and valves, heat exchangers and many other combustible gas applications!

P/N: CG-1000

- Certified intrinsically safe for use in combustible/explosive environments
- Adjustable sensitivity control
- Twice as sensitive as competitive units
- Detects natural gas, propane, ammonia, methanol, ethanol, ethane, butane and other gases
- Variable-intensity audible alarm and flashing LEDs quickly determine leak size and strength
- Auto-zeroing function helps ignore background gas levels in test area
- Rugged flexible probe allows leak checking in tight spaces
- Field-replaceable sensor eliminates downtime
- Includes sensor, (2) D cell batteries and carrying case



### PRO-Chek CG™ Sensitivity Rates

| GAS                    | SENSITIVITY |
|------------------------|-------------|
| Acetone .....          | 50 ppm      |
| Acetylene .....        | 50 ppm      |
| Ammonia .....          | 20 ppm      |
| Butane .....           | 5 ppm       |
| Carbon Dioxide .....   | 500 ppm     |
| Chlorine .....         | 1 ppm       |
| Cyclopentane .....     | 5 ppm       |
| Ethane .....           | 5 ppm       |
| Ethanol .....          | 5 ppm       |
| Ethylene .....         | 500 ppm     |
| Gasoline .....         | 1 ppm       |
| Hydrogen .....         | 500 ppm     |
| Hydrogen Sulfide ..... | 5 ppm       |
| Iso-butane .....       | 5 ppm       |
| Methane .....          | 5 ppm       |
| Methanol .....         | 50 ppm      |
| Methyl Chloride .....  | 5 ppm       |
| Methyl Ether .....     | 500 ppm     |
| Propane .....          | 5 ppm       |
| Vinyl Chloride .....   | 5 ppm       |

This is a partial list of gases that are detectable by the PRO-Chek CG™





LONG WALL



ROOM &  
PILLAR



SURFACE  
MINES



WORKSHOPS &  
INDUSTRIAL  
LOCATIONS

# INDUSTRIAL SAFETY PRODUCTS

Protect your most valuable asset — your workforce!

**PAGES 14-17**





**Accidental chemical and industrial fluid leaks can be quite costly,** impacting the health and safety of workers, the environment and your bottom line. With the renewed demand for stricter safety and environmental regulations, it's more important than ever for all industries that deal with hazardous chemicals and fluids to maintain a safe and secure worksite and prevent leak-related accidents.



### FluidSafe™ Hydraulic Fluid Additive: Two Prong Approach

Mining, forestry, agriculture, construction, and many other industries use heavy equipment outfitted with high-powered hydraulic fluid systems. These systems operate under very high pressures to generate greater production output. A vast amount of energy is contained within these systems, even after shutdown and the potential harm the accidental release of this high pressure energy can do to workers cannot be overemphasized.



FluidSafe™ is a revolutionary fluorescent additive that is specifically designed to aid in the detection and surgical removal of hydraulic fluid under the skin, in the event of accidental high-pressure injection.

This not only allows the quick and accurate detection of fluid injection injuries on site, permitting the triage of cases not requiring surgery, but also helps pinpoint the exact location of hydraulic fluid under the skin, assisting in limiting soft tissue dissection should surgery be required.

When viewed under high-intensity blue light (450 nm), FluidSafe's fluorescent green glow can be seen under the skin. The green fluorescent response will remain visible in the tissue for at least 24 hours after the injection, with no ill effects to the human body.

FluidSafe™ also helps detect leaks in hydraulic hoses, fittings, seals and other components. When used as part of a comprehensive preventative maintenance program with a SafetyBlu™ blue light inspection kit, it can reduce or even eliminate hydraulic fluid loss, minimize equipment breakdown and decrease the risk of injection injuries.



Long Wall



Room and Pillar



Surface Mines



Workshops and Industrial Locations





## FLUIDSAFE™ ADDITIVE LEAK DETECTION PRODUCTS & KIT



### FluidSafe™ Fluorescent Additive

FluidSafe™ comes in two unique blends to work with both oil-based and oil-in-water emulsion hydraulic fluids

Available in a variety of sizes to meet your specific needs.



OIL-BASED  
SYSTEM



FLUORESCES  
GREEN



WATER-BASED  
SYSTEM



FLUORESCES  
GREEN

#### OIL-BASED FORMULA

|                 |                                  |
|-----------------|----------------------------------|
| <b>FSOG-250</b> | 8.5 oz (250 ml) twin-neck bottle |
| <b>FSOG-500</b> | 17 oz (500 ml) twin-neck bottle  |
| <b>FSOG-1L</b>  | 34 oz (1 L) twin-neck bottle     |
| <b>FSOG-1G</b>  | 1 gal (4 L) container            |
| <b>FSOG-5G</b>  | 5 gal (19 L) container           |

**SUGGESTED DILUTION RATIO:** 1 ounce (30 ml) of dye per 12.6 gals (47.6 L) of host oil

#### WATER-BASED FORMULA

|                 |                                  |
|-----------------|----------------------------------|
| <b>FSWG-250</b> | 8.5 oz (250 ml) twin-neck bottle |
| <b>FSWG-500</b> | 17 oz (500 ml) twin-neck bottle  |
| <b>FSWG-1L</b>  | 34 oz (1 L) twin-neck bottle     |
| <b>FSWG-1G</b>  | 1 gal (4 L) container            |
| <b>FSWG-5G</b>  | 5 gal (19 L) container           |

**SUGGESTED DILUTION RATIO:** 1 ounce (30 ml) of dye per 189 gals (715 L) of operating fluid

### SafetyBlu™ Blue Light Inspection Kit

This kit is specially designed to work with FluidSafe™ fluid additive to quickly detect hydraulic fluid injection injuries under the skin, up to 24 hours. Kit would go with EMT and injured person to the ER.

P/N: SB-450

It's also ideal for the fast and easy detection of small leaks in hydraulic systems hoses, fittings, seals and other components, before their safety and integrity has been compromised.

- High-intensity, 450 nm blue light LED flashlight

20' Range  
(6 m)

BLUE  
LIGHT  
LED

NiMH  
RECHARGEABLE  
BATTERY

SMART AC/DC  
CHARGERS

FLUORESCENCE  
ENHANCING

CARRYING CASE

BELT HOLSTER

RUBBER LAMP  
PROTECTOR



## THE TRUE ECONOMIC IMPACT OF HYDRAULIC LEAKS



#### INJECTION INJURIES

**COST TO EMPLOYER  
for Typical Fluid Injection Injury**

**\$32,000**

for 6 weeks compensation,  
including medical bills  
and surgeon fees

**\$3,000**

for 2 weeks  
of light duty

**\$12,000**

Replacement contract  
fitter for 8 weeks

Potential Increase in  
**HEALTH  
INSURANCE  
PREMIUMS**

#### PRODUCTION COSTS

(Numbers are based on longwall coal downtime)



Production costs for other metals/mineral/mining production may differ. In the U.S., an average of \$250,000 per day for up to 14 – 21 days is possible, plus MSHA fines of up to \$100,000.

#### FLUID REPLACEMENT COSTS

A recent study by Exxon/Mobil U.S. found that the average manufacturing operation uses four times the quantity of hydraulic fluid than their equipment reservoirs actual hold. It has been estimated that in North America alone, over 100 million gallons (380 million liters) of fluid could be saved every year if leakage were eliminated. A single hydraulic leak of one drop per second translates into 420 gallons (1,600 L) lost per year. At \$5.00 per gallon, the annual cost of this leakage would be \$2,100. Larger leaks are even more financially devastating. For instance, a 1/16" (1.6 mm) hole in a hydraulic hose can leak 5 gallons (19 L) per minute – the equivalent of 7,200 gallons (27,000 L) at a cost of \$36,000 in just one day!





M-GLO™

## Fluorescent Leak Detection Dye

This unique dye finds small leaks in crude MCHM (4-methylcyclohexanemethanol) chemical storage tanks before they lead to catastrophic spills. It allows easy detection and tracing of chemical spills in soil or water, quickly determining and limiting the extent of possible contamination.

Just add a small amount of M-GLO™ to the chemical storage tank, and circulate it thoroughly to mix. When tank and pipes are scanned with a high-intensity long-wave (365 nm) UV inspection lamp, any and all leaks glow a bright yellow. M-GLO is ideal when used as part of a comprehensive preventive maintenance program, for OSHA and EPA compliance.



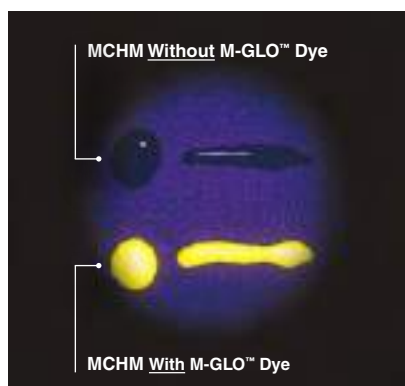
FLUORESCES  
YELLOW

## M-GLO™ DYE

|                 |                             |
|-----------------|-----------------------------|
| <b>MGOY-1G</b>  | 1 gal (4 L) container       |
| <b>MGOY-5G</b>  | 5 gal (19 L) container      |
| <b>MGOY-55G</b> | 55 gal (208 L) container    |
| <b>MGOY-1T</b>  | 264 gal (1,000 L) container |

**SUGGESTED DILUTION RATIO:** 1 gal (4 L) of dye per 6,400 gals (4,226 L) of crude MCHM

**NOTE:** The dilution ratio of M-GLO™ fluorescent dye to the host fluid shown above is only a guideline. The ratio can be increased or decreased depending on the fluorescent response required and the ambient lighting conditions. A simple way to check for proper fluorescence is to remove a small amount of host fluid from the system and add the suggested amount of dye to it. Then shine the UV inspection lamp on this sample mixture and check for a bright fluorescent response.



MCHM samples viewed under long-wave UV (365 nm) light

When viewed under the naked eye, the clear, colorless appearance of crude MCHM is virtually undetectable in soil or water.

After adding a **small amount of M-GLO™ fluorescent dye**, the chemical will glow a **bright yellow** color under high-intensity long-wave (365 nm) light, making leaks and spills much easier to trace.

## BENEFITS OF M-GLO:



**HIGHEST QUALITY**  
Dye is filtered down to 2 microns.



**COST EFFECTIVE**  
Highly concentrated formulation. One gallon (4 L) of dye treats 6,400 gallons (24,226 L) of crude MCHM.



**VERSATILE**  
Pinpoints the exact source of even the smallest, most elusive leaks.



**SEVERAL SIZES**  
Available in 1 gallon (4 L), 5 gallon (19 L), 55 gallon (208 L) and 264 gallon (1,000 L) containers.

## OPTI-LUX™ 365 UV LED Flashlight Kit

Super-compact and rugged! Use with M-GLO™ leak detection dye to quickly and easily locate chemical leaks.

P/N: OLX-365

- Twice as powerful as most corded, high-intensity UV lamps
- Works with all systems and dyes. Especially effective on difficult-to-fluoresce yellow, white and blue dyes — even in dirty fluids
- Convenient on/off switch for easy, one-handed operation
- Instant-on operation; lamp reaches full power immediately!
- Powered by one rechargeable lithium-ion battery. Comes with a spare battery. Each provides 4 hours of continuous inspection time between charges.

**25' Range**  
(8 m)



**Li-ION**  
RECHARGEABLE





AIRCRAFT FUEL  
SYSTEMS



HYDRAULIC  
SYSTEMS



PNEUMATIC  
SYSTEMS



VACUUM  
SYSTEMS



RECIPROCATING  
ENGINE LUBRICATION  
SYSTEMS



TURBINE  
ENGINES

# AVIATION PRODUCTS

Locate leaks fast so you can fly high.

**PAGES 18-21**





## FAST

The quickest way to inspect for leaks in aircraft fuel, lubrication and hydraulic systems.



## SAFE

Specially formulated to accommodate the host fluid. Will not damage the fluid properties or any of the system components.



## VERSATILE

Allows inspection of the entire system under virtually all operating conditions. Ideal for both in-flight and static testing.



## COST EFFECTIVE

Super-concentrated. Use less per dose!

## AERO-BRITE™ Universal Fluorescent Leak Detection Dye

Locates all leaks in petroleum- and synthetic-based aviation fluid systems. Checks an entire system in just minutes. Ideal for use as part of a diagnostic/preventive maintenance program for commercial and military aircraft fuel and fluid systems.

P/N: AD-8609

- 0008 8 oz (237 ml) twin-neck bottle
- 0016 16 oz (473 ml) twin-neck bottle
- 0032 32 oz (946 ml) twin-neck bottle
- 0100 1 gal (4 L) container

Meets **Mil Spec MIL-PRF-81298E, Type III** for aircraft fuel systems



OIL-BASED  
SYSTEM



FLUORESCES  
GREEN



## SUGGESTED DILUTION RATIOS

| Host Fluid           | Dye Amount                              |
|----------------------|---|
| Jet Fuel (static)    | 2 oz (60 ml) dye per 100 gals (379 L)   |
| Jet Fuel (in-flight) | 1.6 oz (47 ml) dye per 100 gals (379 L) |
| Hydraulic Fluid      | 0.25 oz (7 ml) dye per 4 gals (15 L)    |
| Engine Oil           | 0.25 oz (7 ml) dye per 1 gal (4 L)      |

**Also available: SP-8609-0100 fluorescent leak detection dye for aircraft fuel systems (NSN: 6820-01-386-8609).** Can also be used to locate hydraulic and engine oil leaks. Supplied in 1 gallon (4 L) container.



## AVIATION LEAK DETECTION KITS



**PREVENTS EXPENSIVE  
EQUIPMENT BREAKDOWN  
AND POTENTIAL SAFETY  
HAZARDS.**

**IDEAL FOR PINPOINTING  
LEAKS IN FUEL,  
LUBRICATION AND  
HYDRAULIC SYSTEMS.**



**OIL-BASED  
SYSTEM**



**FLUORESCES  
GREEN**

### Aviation Leak Detection Kit

The most complete kit for finding leaks in aircraft fluid systems. Works with all petroleum- and synthetic-based lubricants and fluids.

**P/N: ALK-365**

- OPX-365 OPTIMAX™ 365 super-high intensity, cordless, rechargeable UV LED leak detection flashlight
- 8 oz (237 ml) twin-neck bottle of AERO-BRITE™ universal fluorescent dye for aircraft fluid systems



### OPTI-LUX™ 365 UV LED Flashlight Kit

Super-compact and rugged! Works with all petroleum- and synthetic-based lubricants and fluids.

**P/N: OLX-365**

- Twice as powerful as most corded, high-intensity UV lamps
- Works with all systems and dyes. Especially effective on difficult-to-fluoresce yellow, white and blue dyes — even in dirty fluids
- Convenient on/off switch for easy, one-handed operation
- Instant-on operation; lamp reaches full power immediately!
- Powered by one rechargeable lithium-ion battery. Comes with a spare battery. Each provides 4 hours of continuous inspection time between charges.







## Marksman™ II

### ULTRASONIC DIAGNOSTIC TOOL

**Hear What You Need To Hear!**

**PROVIDES QUICK DIAGNOSIS  
AND DETECTION OF PROBLEMS  
BEFORE THEY BECOME MAJOR  
BREAKDOWNS.**

### Marksman™ II Ultrasonic Diagnostic Tool

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

**P/N: MDE-2000LNC**

- 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
- Ideal for aircraft pneumatic systems, fuel system pressurization testing, oxygen line and valves, internal leaks in hydraulic valves and actuators, fuel cell testing, identifying cavitation in hydraulic pumps, arcing in wave guides, cabin pressure testing, pilot static system, health checks, emergency evacuation slides, electrical discharge, air ducts and air conditioning systems, tire pressure retention, cabin and cockpit window and door seals, and other aircraft maintenance
- Comes complete with ultrasonic receiver, ultrasonic emitter, air probe, contact probe, noise-cancelling headphones, (2) D cell batteries and carrying case



**SCAN QR CODE  
TO LEARN MORE**





SMALL SIZED  
CRAFT



MEDIUM SIZED  
CRAFT



# MARINE PRODUCTS

Keep your marine vessel leak free and in the water.

**PAGES 22-23**



**USER FRIENDLY**

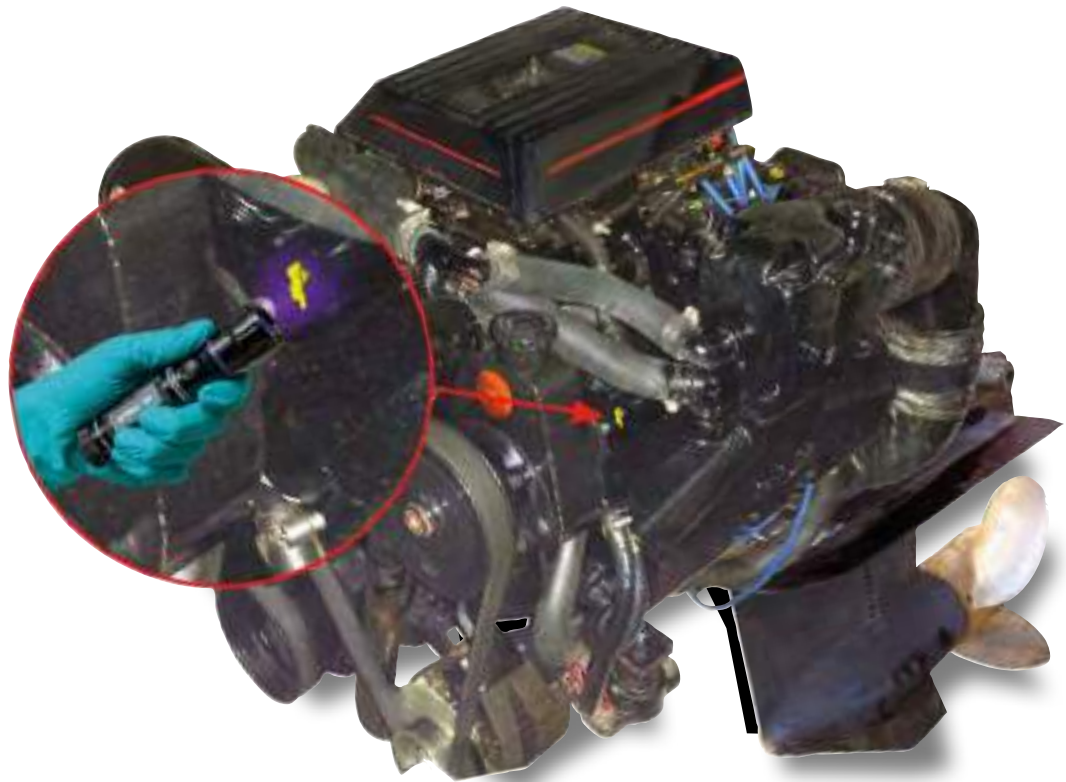
Comes with two uniquely colored fluorescent dyes to distinguish between different leaking fluid systems.

**NSF CERTIFIED**

OIL-GLO® 44 and OIL-GLO® 50 are NSF Certified and meet category codes HTX-2 and HX-2.

**ENVIRONMENTALLY FRIENDLY**

Helps prevent oil slicks which could lead to marina fines or penalties from Environmental Protection Agency (EPA) and OSHA.

**Marine Leak Detection Kit**

The fastest, easiest and most accurate way to find fuel, oil and hydraulic leaks in **small to medium** sized craft.

P/N: OPK-400M

- OPX-400I OPTIMAX™ 400 high-intensity, battery operated violet light LED leak detection flashlight
- 1 oz (30 ml) bottle of patented OIL-GLO® 44 concentrated oil dye. Treats up to 8 gallons (30 L) of fluid.
- 1 oz (30 ml) bottle of OIL-GLO® 50 concentrated oil dye. Treats up to 8 gallons (30 L) of fluid.

**25' Range**  
(8 m)

**VIOLET LIGHT**  
LED

**3**  
AAA  
BATTERIES

**FLUORESCENCE**  
ENHANCING

**GLO-AWAY™**  
DYE CLEANER

**CARRYING CASE**

**DYE TREATMENT**  
TAGS



**OIL-BASED  
SYSTEM**



**FLUORESCES  
YELLOW/  
GREEN**



**FLUORESCES  
RED**



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Information



Technical  
Assistance



Local Sales  
Representatives



Authorized  
Distributors

## PRODUCT/CUSTOMER SUPPORT & TECHNICAL ASSISTANCE

Product literature, instructions and a full staff of trained customer service representatives and technical service engineers are available for support. Additional product information and support are available on our website [www.spectroline.com](http://www.spectroline.com).



**PLACE AN ORDER:**  
[Orders@Spectroline.com](mailto:Orders@Spectroline.com)



**GET SUPPORT:**  
[CustomerService@Spectroline.com](mailto:CustomerService@Spectroline.com)  
or call (516) 333-4840

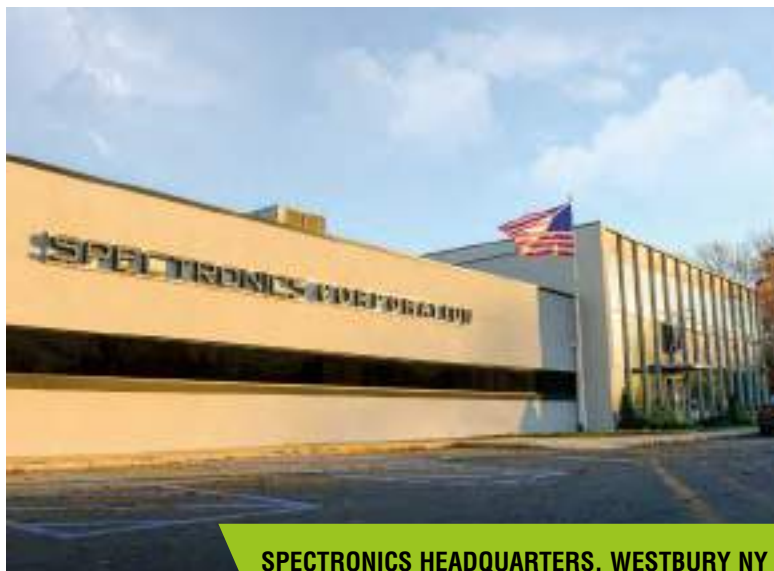


**SEE MORE:**  
Scan QR Code

## THE INVENTORS OF **FLUORESCENT** LEAK DETECTION

Since 1955, Spectronics Corporation has been **the industry leader of inventing and manufacturing fluorescent dyes and materials**. More than six decades since its inception, the goal of Spectronics is still the same — to produce effective, top-quality products that are on the cutting edge of today's technology with the utmost dedication to customer satisfaction.

**Our Industrial product line is no exception. Our Spectroline® brand of products are the first and only choice for professionals around the world.**



**SPECTRONICS HEADQUARTERS, WESTBURY NY**

**SPECTRONICS**  
CORPORATION  
[www.spectroline.com](http://www.spectroline.com)

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02/18 A17328-3  
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