

Fluorescent Leak Detection Products & System Additives for AC&R Systems









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FLUORESCENT LEAK DETECTION:

Working for you 24/7 - Once IN, always ON.







Add dye to the system & let it circulate

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

Dye continues circulating in the system 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!

Introducing the **NEW & IMPROVED AR-GLO® 5** FLUORESCENT DYE

For 2019, Spectroline is proud to announce the release of AR-GLO[®] 5 Fluorescent Dye – **our brightest, highest quality, and most advanced dye formula ever.**

The new AR-GLO[®] 5 dye formula fluoresces up to **10% brighter**. That's a big improvement and sets us even further apart from other brand formulations on the market.

In addition, AR-GLO[®] 5 dyes have an **increased resistance to extreme temperature ranges and moisture.** The bottom line: these quality dyes perform better under difficult conditions and have greater stability, making them the perfect tool **for long-term preventative maintenance and leak detection.**

The dye has a much greater shelf life. It can be stored up to **150% longer**.



Fluoresces up to 10% Brighter*

Improved Stability

More tolerant to extreme temperature range & moisture



Improved Shelf Life 150% Improvement Up to 5 years



More Eco-Friendly

Formulated with safe raw materials & helps reduce refrigeration emissions into the atmosphere



Exclusive Formula

From the inventors & most trusted name in fluorescent leak detection

Spectroline® dyes glow brighter than the competition.

AR-GLO[®] 5 Dye Formula Competitor Dye Formula

Shown under 400 nm light with amber glasses

*Depending on system application ratio

EZ-Ject[™] (Patented)</sup> Fluorescent Dye Injection System

The revolutionary way to add fluorescent dyes into air conditioning and refrigeration systems — without the use of additional refrigerant, manifold and additional hoses.

- No pouring and no refrigerant required for injection.
- One calibrated cartridge provides exact dosing for multiple systems. Easily overcomes system pressure.
- ▶ Inject dye with a turn of the handle.



AR-GLO® 5E: Brighter Performance Dye Works in all AC&R systems, overcomes system pressure up to: 450 PSI

Co-Solvent Free Dye Multi-Dose Cartridge



EZ-Ject[™] COMPLETE Fluorescent Leak Detection Kit

SPE-HVLEZE

- ► SPE-HVL-CS violet light LED leak detection lamp
- ▶ SPE-EZ5E (2) 0.5 oz (15 ml) universal/POE dye cartridges
- ► EZ-50 EZ-Ject[™] dye injector assembly
- ► EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly with low-loss fitting & check valve
- 128186 R-410a adapter





- (2) SPE-EZ5E 0.5 oz (15 ml) universal/POE dye cartridges
- ► EZ-50 EZ-Ject[™] dye injector assembly
- ► EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly
- with low-loss fitting & check valve128186 R-410a adapter

Treats a TOTAL of up to:

- 4 gal (15.2 ml) of lubricant or
- 50 lbs (22.6 kg) of refrigerant or
- ▶ 24 tons (84.4 kW) of cooling



EZ-Ject[™] Fluorescent Dye Cartridge SPE-**EZ5E**-CS

 0.5 oz (15 ml) universal/POE dye cartridge

Treats up to:

- 2 gal (7.6 ml) of lubricant or
- 25 lbs (11.3 kg) of refrigerant or
- ► 12 tons (42.2 kW) of cooling

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GLO-STICK[®] (Patented) Fluorescent Dye Capsule System

Convenient, mess-free, single-dose capsules. Add refrigerant and fluorescent dye in one simple step.

- Available in 4 sizes/concentrations to match the capacity of the system.
- Inject dye while charging with refrigerant, or when connecting from the high side to the low side.





Works in all AC&R systems, overcomes system pressure up to: 450 PSI

Co-Solvent Free Dye

Single-Dose Capsules



GLO-STICK® COMPLETE Fluorescent Leak Detection Kit

SPE-HVLGSE

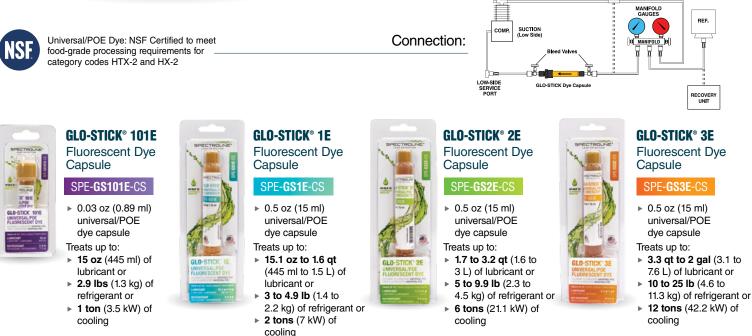
- SPE-HVL-CS violet light LED leak detection lamp
- ▶ SPE-GS1E (1) 0.5 oz (15 ml) universal/POE GLO-STICK® dye capsule
- ▶ SPE-GS2E (2) 0.5 oz (15 ml) universal/POE GLO-STICK® dye capsules
- ▶ SPE-GS3E (1) 0.5 oz (15 ml) universal/POE GLO-STICK® dye capsule
- ► **BV-50** bleed valve for attaching GLO-STICK[®] capsule to service hose
- ► EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly with low-loss fitting & check valve

HIGH-SIDE SERVICE PORT

PC-0249 purge capsule
 128186 R-410a adapter



(Discharge Side)



For systems using PVE lubricant: SPE-GS101PVE-P6, SPE-GS1PVE-P6, SPE-GS2PVE-P6, SPE-GS3PVE-P6

BigEZ[™] (Patented) Fluorescent Dye Injection System

No pouring, no refrigerant, no spills — prefilled BigEZ[™] cartridges are clearly labeled with 32 or 64 calibrations so you'll introduce exactly the right amount of dye every time!

- One calibrated cartridge provides exact dosing for multiple systems.
- Easily overcomes system pressure.
- Inject dye with a turn of the handle.



AR-GLO® 5E: Brighter Performance Dye

Works in all AC&R systems, overcomes system pressure up to:

200 PSI

Co-Solvent Free Dye

Multi-Dose Cartridge



SPE-BEZ400E-CS BigEZ[™] Fluorescent Dye Injection Kit

BigEZ[™] COMPLETE Fluorescent Leak Detection Kit

SPE-HVLBEZE

- SPE-HVL-CS violet light LED leak detection lamp
- ▶ SPE-BEZ5E 4 oz (118 ml) BigEZ[™] fluorescent dye cartridge
- ▶ **BEZ-50** BigEZ[™] dye injector assembly
- ▶ BEZ-25 8 in (20 cm) BigEZ[™] hose assembly with low-loss fitting & check valve



Also Available:





AR-GLO[®] 5E Fluorescent Leak Detection Dye SPE-AG5E-16

16 oz (473 ml) twin neck bottle
 Treats up to:

64 gallons (242 L) of lubricant

*Additional sizes available

AR-GLO[®] 5E (Patented) Fluorescent Leak Detection Dye

AR-GLO[®] bottled dyes can be poured directly into any AC&R system. Dye can remain safely in the system to confirm repairs and preform future preventive maintenance checks.

- Universal/POE dye is compatible with ALL refrigerants and lubricants
- Fluoresces up to 10% brighter
- Improved Shelf Life Up to 5 years!
- Improved Stability More tolerant to extreme temperature range & moisture
- Environmentally Sound Natural safe raw materials, small carbon footprint
- Exclusive Formula From the inventors and most trusted name in fluorescent leak detection



Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX-2 and HX-2



WATER-GLO® 802 (Patented) Fluorescent Leak Detection Dye

Find leaks fast in industrial sized water and water/glycolbased fluid systems. Ideal for heat transfer fluid system applications, including boilers, chillers, geothermal heat pump systems and many more.

- Highly concentrated dye that fluoresces green
- Works with ANY leak detection lamp
- Pinpoint leaks in piping, valves, condensers, seals, welds, and fittings
- Ideal for use as part of a diagnostic/preventive maintenance program



WATER-GLO® 802 Dye: NSF Certified to meet food-grade processing requirements for category codes G7, GX and HTX-2



WATER-GLO[®] 802 Fluorescent Leak Detection Dye

WATER-GLO 802-P

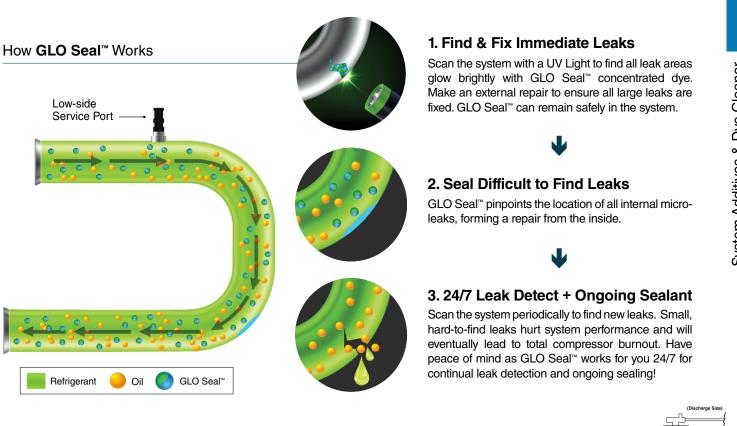
 16 oz (473 ml) twin neck bottle Treats up to:

1,000 gallons (3,800 L) of water



(516) 333.4840 www.spectroline.com

SUCTION



EZ-Ject™ Injection Method



GLO Seal[™] Fluorescent Dye + Sealant EZ-Ject[™] Dye Injection Kit

SPE-EZDSK-CS NEW!

- SPE-EZDS (2) 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with GLO Seal[™] Fluorescent Dye + Sealant
 EZ-50 EZ-Ject[™] dye injector assembly
- ► EZ-50 EZ-50 CT uye injector assembly
 ► EZ-25 8 in (20 cm) Cool Seal™ EZ-Ject™ hose
- assembly with low-loss fitting & check valve **128186** R-410a adapter

Service labels

Treats a **TOTAL** of up to: **5 tons** (17.6 kW) of cooling



Reusable Injector Assembly: Save money on unnecessary hardware with each application!

Stick Capsule Injection Method



GLO Seal[™] Fluorescent Dye + Sealant Stick Capsule

SPE-GSDS-CS NEW!

- ▶ 0.5 oz (15 ml) stick capsule prefilled with GLO Seal[™] Fluorescent Dye + Sealant
- Requires bleed valves for injection
- Treats up to:

2.5 tons (8.8 kW) of cooling



GL0 Seal[™] Fluorescent Dye + Sealant

EZ-Ject[™] Cartridge

Connection:

SPE-EZDS-CS NEW!

- 0.5 oz (15 ml) EZ-Ject[™] cartridge prefilled with GLO Seal[™] Fluorescent Dye + Sealant Treats up to:
- ▶ 2.5 tons (8.8 kW) of cooling

(Discharge Side) HIGH-SIDE SERVICE PORT (Com R Suction (Low Side) Bleed Valves Bl



Requires two (not included)

COOLSEAL™ (Patented) A/C Leak Sealer

Seals micro leaks in condensers, evaporators, O-rings and hoses. Can add years to older, out-of-warranty AC&R systems that leak small amounts of refrigerant.

- ► Works with all popular refrigerants and oils.
- Remains safely in system to help protect against future leaks.





SAFE, NON-POLYMER Oil-Soluble Formula ASHRAE Meets ASHRAE ASHR

ASHRAE 97 Standards for Chemical Stability

EZ-Ject[™] Injection Method



Cool Seal[™] EZ-Ject[™] Injection Kit

CS-100CS

- ► CS-1 (2) 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with Cool Seal[™] A/C Leak Sealer
- ► EZ-50 EZ-Ject[™] dye injector assembly
- ► CS-25 8 in (20 cm) Cool Seal[™] EZ-Ject[™] hose assembly with low-loss fitting & check valve
- 128186 R-410a adapter
- Service labels
- Treats a TOTAL of up to:
- 4 tons (14 kW) of cooling



BigEZ[™] Injection Method

Cool Seal[™] EZ-Ject[™] Cartridge

CS-1CS

▶ 0.5 oz (15 ml) EZ-Ject[™] cartridge prefilled with Cool Seal A/C Leak Sealer

Delivery Methods

Treats up to:

2 tons (7 kW) of cooling

Also Available:

CS-1/15CS Cool Seal[™] EZ-Ject[™] Contractor's Value Pack (15) CS-1 0.5 oz (15 ml) Cool Seal[™] A/C leak sealer cartridges. Treats a <u>total</u> of **30 tons** (105.5 kW) of cooling.

Stick Capsule Injection Method



Cool Seal[™] Stick Capsule

CS-3CS

- ► 0.5 oz (15 ml) stick capsule prefilled with Cool Seal[™] A/C Leak Sealer
- Add Cool Seal[™] A/C Leak Sealer and refrigerant in one simple step
- Requires bleed valves for injection

Treats up to:

2 tons (7 kW) of cooling





Cool Seal[™] BigEZ[™] Cartridge

CS-2CS

- ► 2 oz (60 ml) large, prefilled cartridge works with BigEZ[™] injector
- ► Can also be used with EZ-Ject[™] injector Treats up to:
- ▶ 8 tons (28.1 kW) of cooling

BigEZ[™] Assembly:

5	
BEZ-50	BigEZ [™] injector assembly
CS-35	8 in (20 cm) BigEZ [™] hose assembly
	with low-loss fitting & check valve
EZ-Ject [™] A	ssembly:
EZ-50	EZ-Ject [™] dye injector assembly
CS-50	EZ-Ject [™] adapter
119690	Purge fitting

NOTE: Injection assembly not included.

ACID-BUSTER[™](Patented)</sup> Acid Scavenging Solution

Twice as concentrated as competitive solutions. Works with **ALL** refrigerants and lubricants (mineral oil, POE, PVE, and alkyl benzene lubricant).

- Compatible with semi-hermetic, hermetic and scroll compressors.
- Direct, reusable injector eliminates the need for an oil pump.



Eliminates Acid Buildup in AC&R Systems Works in all AC&R systems, overcomes system pressure up to:

450 PSI



Prevents Compressor Burnout



ACID-BUSTER[™] EZ-Ject[™] Injection Kit

AB-100CS

- ► AB-5 (2) 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with ACID-BUSTER[™] Acid Scavenging Solution
- ► EZ-50 EZ-Ject[™] injector assembly
- ► EZ-25 8 in (20 cm) EZ-Ject[™] hose assembly with low-loss fitting & check valve
- ▶ 128186 R-410a adapter
- Service labels
- Treats a TOTAL of up to:
- ▶ 64 oz (1,892 ml) of lubricant



ACID-BUSTER[™] EZ-Ject[™] Cartridge

AB-5CS

- ▶ 0.5 oz (15 ml) EZ-Ject[™] cartridges prefilled with ACID-BUSTER[™] Acid Scavenging Solution
- Treats up to
- ▶ 32 oz (946 ml) of lubricant

GLO-AWAY® PLUS + Fluorescent Dye Cleaner

- New formulation that works to dissolve fluorescent dye from the leak site.
- Requires less application & less time removing left over dye.



CONCENTRATED Stronger formula makes it

easier to remove the toughest dye stains.



NEW & IMPROVED!

GLO-AWAY® PLUS Fluorescent Dye Cleaner



2 oz (60 ml) spray bottle

SPECTROLINE

31 Lamp Design

Violet Light LED Leak Detection Lamp

Economical and powerful, cordless leak detection lamp. Reveals even the smallest refrigerant leaks!

SPE-HVL-CS

- Provides optimal fluorescent dye response and contrast
- Pre-focused beam optimizes fluorescent response
- Compact design easily gets into tight, cramped spaces
- Rugged, corrosion-resistance anodized lamp body stands up to years of heavy use
- ▶ Anti-roll cuff
- Runtime: 5 hours







3x AAA







NOTE: For most applications, our violet light lamp does not require fluorescenceenhancing glasses.



The Spectroline® brand is trusted by more HVAC/R OEMs than any other brand...



FREQUENTLY ASKED QUESTIONS

0

UV MAN IS HERE TO ANSWER YOUR QUESTIONS!

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. Spectroline products are the first and only choice for AC&R professionals. Our OEMapproved fluorescent dyes are co-solvent free, NSF certified, and can safely remain within AC&R systems.

How do I use fluorescent leak detection dye?

Simply add our patented dye to the suspect system. 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.

Which injection method should I use?

Use our EZ-Ject[™] or GLO-STICK[®] injection method for small-to-medium sized AC&R systems – such as residential units, ice machines, window units, and refrigerators. Use our BigEZ[™] injection method for medium-to-large sized AC&R systems – e.g., commercial units, supermarket units, refrigerated warehouses, food and dairy plants, and industrial facilities. Review our product dosage information for the correct application.

What are co-solvents and how do they alter system performance?

Co-solvents are chemical substances added to increase the solubility of specific compounds. This means co-solvents harmfully change the original lubricant properties of refrigerant oil. Co-solvents can lead to premature wear and outright damage. Poorly manufactured fluorescent dyes typically contain high levels of co-solvents. In addition to changing system properties, co-solvents have the potential to deteriorate system metals.

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?

In small-to-medium sized systems, you can find leaks within minutes. In commercial systems, it may take 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.

System Type: $^{\odot}$	Small Systems: Ice Machines, Window A/C Units & Refrigerators	Residential Systems	Light Commercial & Large Residential Systems	Commercial & Light Industrial Systems		
EZ-Ject [™] Multi-Dose C	Cartridge for Small to Med	dium Sized Systems				
Lubricant	Up to 15 oz (445 ml)	15.1 oz to 1.6 qt (445 ml to 1.5 L)	1.7 to 3.2 qt (1.6 to 3 L)	3.3 qt to 2 gal (3.1 to 7.6 L)		
Refrigerant Charge	Up to 2.9 lb (1.3 kg)	3 to 4.9 lb (1.4 to 2.2 kg)	5 to 9.9 lb (2.3 to 4.5 kg)	10 to 25 lb (4.6 to 11.3 kg)		
Tons of Cooling	Up to 1 ton (3.5 kW)	1.1 to 2 tons (3.9 to 7 kW)	2.1 to 6 tons (7.4 to 21.1 kW)	6.1 to 12 tons (21.5 to 42.2 kW)		
Horsepower	Up to 1 Hp	1.1 to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp		
Lines on Cartridge	1 line	2 lines	6 lines	8 - 14 lines		
GLO-Stick [®] Single-Do	se Capsules for Small to	Medium Sized Systems				
Lubricant	Up to 15 oz (445 ml)	15.1 oz to 1.6 qt (445 ml to 1.5 L)	1.7 to 3.2 qt (1.6 to 3 L)	3.3 qt to 2 gal (3.1 to 7.6 L)		
Refrigerant Charge	Up to 2.9 lb (1.3 kg)	3 to 4.9 lb (1.4 to 2.2 kg)	5 to 9.9 lb (2.3 to 4.5 kg)	10 to 25 lb (4.6 to 11.3 kg)		
Tons of Cooling	Up to 1 ton (3.5 kW)	1.1 to 2 tons (3.9 to 7 kW)	2.1 to 6 tons (7.4 to 21.1 kW)	6.1 to 12 tons (21.5 to 42.2 kW)		
Horsepower	Up to 1 Hp	1.1 to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp		
ubricant Type:						
Universal/POE	SPE-GS101E	SPE-GS1E	SPE-GS2E	SPE-GS3E		
PVE	SPE-GS101PVE	SPE-GS1PVE	SPE-GS2PVE	SPE-GS3PVE		
BigEZ [™] Multi-Dose Ca SPE-BEZ5E	rtridge for Medium to Lar BigEZ [™] Method	1 line,	1/8 oz (3.7 ml) per 1/2 gal (1.9 5.7 kg) of refrigerant or 5 tons (1			
Bottled Dyes			5,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
SPE-AG5E-16	AR-GLO [®] 5E	0.2	25 oz (74 ml) per gallon (3.8 L)	of lubricant		
WATER-GLO 802-P	WATER-GLO®		0.25 oz (7.4 ml) per gallon (3.8 L) of lubricant 16 oz (473 ml) per 1,000 gallons (3,800 L) of water			
CI O Seal™ Eluoroscor	nt Dye + Sealant for Sma	Il to Modium Sized Syste	me			
SPE-EZDS-CS	EZ-Ject [™] Method			foooling		
SPE-GSDS-CS	Stick Capsule Method		Treats up to 2.5 tons (8.8 kW) of cooling Treats up to 2.5 tons (8.8 kW) of cooling			
Cool Seal™ A/C Leak 9	Sealer for Small to Mediu					
CS-1CS / CS-1/15CS	EZ-Ject™ Method		Treats up to 2 tons (7 kW) of cooling /			
CS-2CS	EZ-Ject [™] or BigEZ [™] Me		Contractor Pack of (15) cartridges treats a total of 30 tons (105.5 kW) of cooling Treats up to 8 tons (28.1 kW) of cooling			
CS-3CS	Stick Capsule Metho		Treats up to 2 tons (7 kW) of cooling			
ACID-BUSTER™ Acid	Scavenging Solution for S	Small to Medium Sized S	Systems			
AB-5CS ^①	EZ-Ject [™] Method		4 lines, 1/8 oz (3.7 ml) per 8 oz (237 ml) of refrigerant oil			
			Treats up to 32 qt (946 ml) of oil			

0 On severely acidic systems, double the dosage shown



Innovating for Today + Imagining for Tomorrow

INVENTORS & PIONEERS Since 1955

For more than 60 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.





PLACE AN ORDER: Orders@Spectroline.com GET SUPPORT: CustomerService@Spectroline.com or call (516) 333-4840





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