

FLUORESCENT LEAK DETECTION AND SYSTEM ADDITIVES

FOR ALL AC&R SYSTEMS







FLUORESCENT LEAK DETECTION TOOLS WORKING FOR YOU 24/7 – ONCE IN, ALWAYS ON.



OVER 65 YEARS OF LEAK DETECTION EXPERIENCE

Spectronics Corporation has engineered the highest-quality, premium performance leak detection dyes and products since 1955.

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

We are a family owned company with three generations of experience in delivering awardwinning professional service and the industry's most powerful leak detection dyes, additives and lamps.

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THE SPECTROLINE®

It's important to choose a brand that produces pure, safe, highly concentrated dyes and quality inspection lamps to get the most benefit from the technology.



Scan/Click





Versatile

- Safe for all types of units
- Ranging from small to large systems



Compatible

 With all popular refrigerants and lubricants



Specifically Formulated

- **>** <u>Without</u> particulate matter
- **Cannot** be filtered out or separated

System Safe

- **Fully miscible**, filtered down to 2 microns
- **>** Will **NOT** affect operating characteristics of any system

3



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 ₩450 systems, overcomes system pressure

PSI

SCAN/CLICK FOR VIDEO



Small-Medium Sized AC&R Systems

S-M





PSI

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

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

- Available in 3 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.



AR-GLO® 5E: Brighter Performance Dye

Works in all AC&R **%450** systems, overcomes system pressure



Product No.	Description	Treats up to	- 18
SPE-HVLGSE	GLO-STICK ⁻ COMPLETE Fluorescent Leak Detection Kit: > SPE-HVL-CS UV LED leak detection lamp (1) SPE-GSIE 0.5 oz (15 ml) dye capsule > (2) SPE-GS2E 0.5 oz (15 ml) dye capsules + (1) SPE-GS3E 0.5 oz (15 ml) dye capsule > RP-BV-50 bleed valve > RP-EZ-25 8 in (20 cm) EZ-Ject ⁻ hose assembly > RP-UVS-40 Fluorescence-enhancing glasses > RP-AD-410A R-410a adapter/purge fitting > RP-GA-2 GLO-AWAY ⁻ PLUS concentrated fluorescent dye cleaner > Purge capsule	See below for dosage amounts of the GLO-STICK' capsules	
SPE-GS1E-CS	GLO-STICK [•] 1E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	1.6 qt (1.5 L) of lubricant or 4.9 lb (1.4 to 2.2 kg) of refrigerant or 2 tons (7 kW) of cooling	2:1 2:
SPE-GS2E-CS	GLO-STICK ⁻ 2E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	1.7 to 3.2 qt (1.6 to 3 L) of lubricant or 5 to 9.9 lb (2.3 to 4.5 kg) of refrigerant or 6 tons (21.1 kW) of cooling	
SPE-GS3E-CS	GLO-STICK[*] 3E (1) 0.5 oz (15 ml) universal/POE fluorescent dye capsule	3.3 qt to 2 gal (3.1 to 7.6 L) of lubricant or 10 to 25 lb (4.6 to 11.3 kg) of refrigerant or 12 tons (42.2 kW) of cooling	

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





Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX2 and HX-2



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.

AR-GLO® 5E: Brighter

Performance Dye

Inject dye with a turn of the handle.



Free Dye





3x UV **LED** Batteries Included Fluorescenc Enhancing GLO-AWAY Plus + Service Labels



PSI

system pressure

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



ECTROLINE



Universal/POE Dye: NSF Certified to meet food-grade processing requirements for category codes HTX2 and HX-2

SYSTEM ADDITIVES

Professional Grade Solutions to Protect AC&R Systems from Leaks





Acid Scavenging Solution

PSI

쌺450 <u>AR</u>

PREVENT Compressor Burnout







GLO Seal



GLO Seal" pinpoints the location of all internal micro-leaks, and stops deterioration forming a repair from the inside.

24/7 Leak Detect + Ongoing Sealant

Scan the system periodically to find new leaks. GLO Seal" works 24/7 for continual leak detection and ongoing sealing.

Syringe Injection

GLO Seal[™] Fluorescent Dye + Sealant Single-Use Syringe & Dual Adapter Injection Kit

▶ Patented dual pivoting adapter easily switches from 5/16" or 1/4" flare fittings

Leak Site

Sealed

Ideal for mini-splits and small appliances

Product No.	Description	Treats
SPE-SDSK-CS New	(1) Single-use syringe injector prefilled with GLO Seal ⁻ Fluorescent Dye + Sealant	0.5 - 2.5 tons (1.76 - 8.79 kW) of cooling





Stick Capsule Injection





Product No.	Description	Treats up to
SPE-MVLGSDS	 GLO Seal[®] STICK COMPLETE Fluorescent Leak Detection Kit: SPE-MVL-CS Mini UV LED leak detection lamp (4) SPE-GSDS 0.5 oz (15 ml) stick capsule prefilled with GLO Seal[®] Fluorescent Dye + Sealant RP-BV-50 bleed valve RP-EZ-25 8 in (20 cm) EZ-Ject[®] hose assembly RP-UVS-40 Fluorescence-enhancing glasses RP-AD-410A R-410a adapter/purge fitting RP-GA-2 GLO-AWAY[®] PLUS concentrated fluorescent dye cleaner Purge capsule 	3.5 tons (12.3 kW) of cooling (x4)
SPE-GSDS-CS	(1) Stick capsule prefilled with GLO Seal ⁻ Fluorescent Dye + Sealant	3.5 tons (12.3 kW) of cooling



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.





CS-100CS

SAFE, NON-POLYMER Oil-Soluble Formula # 450Works in all AC&RPSIsystems, overcomessystem pressure

4 S TONS OF COOLING

System Treatment Capacity



8 tons (28.1 kW) of cooling

- prefilled with Cool Seal[®] A/C Leak Sealer ► RP-EZ-50 EZ-Ject[®] dye injector assembly ► RP-CS-25 8 in (20 cm) Cool Seal[®] EZ-Ject[®]
- hose assembly ► **RP-AD-410A** R-410a adapter/purge fitting

Cool Seal" EZ-Ject" Dye Injection Kit:

▶ (2) CS-1 0.5 oz (15 ml) EZ-Ject[™] cartridges

Service labels

Bleed valve (sold separately)





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



RP-BV-50

ACID-BUSTER[™] (Patented)

Acid Scavenging Solution

Ready-to-use solution, eliminates acid-build up and helps prevent compressor burnout. Use for preventative maintenance and repair – it will not contaminate the refrigerant or lubricant or leave behind harmful residue. Compatible with semi-hermetic, hermetic and scroll compressors.

- Twice as concentrated as competitive solutions.
- Works with all refrigerants and lubricants.

Safe for System

Components

Direct, reusable injector protects against overdosing.



₩ 450 Works PSI system

Works in all AC&R systems, overcomes system pressure



Prevents Compressor Burnout



	·	-
AB-5CS	(1) EZ-Ject [*] cartridge prefilled with ACID-BUSTER [*] Acid Scavenging Solution	2 tons (7 kW) of cooling
AB-100CS	 ACID-BUSTER[*] EZ-Ject[*] Dye Injection Kit: (2) AB-5CS 0.5 oz (15 ml) EZ-Ject[*] cartridges prefilled with ACID-BUSTER[*] Acid Scavenging Solution RP-EZ-50 EZ-Ject[*] dye injector assembly RP-EZ-25 8 in (20 cm) EZ-Ject[*] hose assembly RP-AD-410A R-410a adapter/purge fitting Service labels 	4 tons (14.1 kW) of cooling



₩

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



ACID-BUSTER[™]

Acid Scavenging Solution

- ▶ 0.5 oz (15 ml) stick capsule
- Requires bleed valve for injection

Compressor			
Low Side -	RP-EZ-25 11) 11+55 - 56 - 36	Bleed Valve	

High Side —



Product No.	Description	Treats up to
SPE-ABS-CS	(1) Stick capsule prefilled with ACID-BUSTER ⁻ Acid Scavenging Solution	2 tons (7 kW) of cooling
RP-BV-50	Bleed valve (sold separately)	



WATER-GLO[®] ULTRA

(Patented)

Fluorescent Leak Detection Dye

Find leaks fast in industrial sized water and water/glycolbased fluid systems. Concentrated dye that fluoresces green and works in both static and circulating fluid systems.

IDEAL FOR:

 Heat transfer fluid system applications – boilers, chillers, geothermal heat pump systems and many more.



Brighter Performance Dye FILTERED 22

FULLY MISCIBLE: High Quality, non-particulate & filtered down to 2 microns.



Co-Solvent Free Dye

WATER-GLO[®] ULTRA

- Fluorescent Leak Detection Dye
- ► 8 oz (237 ml) twin neck bottle
- ► Full color hanging clamshell

Product No.	Description	Treats up to
SPE-WGG-8CS*	WATER-GLO [®] ULTRA Fluorescent Leak Detection Dye	500 gallons (1,893 L) of water
*Additional sizes avai	abla	

*Additional sizes available



WATER-GLO[•] Ultra Dye: NSF Certified to meet food-grade processing requirements for category codes G7, GX and HTX2



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.



Other Dye Cleaners



GLO-AWAY PLUS

CONCENTRATED FORMULA

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



GLO-AWAY[®] **PLUS** Fluorescent Dye Cleaner

▶ 2 oz (60 ml) spray bottle

Product No.	Description
RP-GA-2	GLO-AWAY [~] PLUS Fluorescent Dye Cleaner

SPECTROLINE® UV LED Leak Detection Lamp

SPE-HVL-CS

- Battery Operated
- Provides optimal fluorescent dye response and contrast
- Features an anti-roll cuff
- Durable anodized body for years of heavy use





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Specifications

Light Source:	LED
Lamp Style:	Cordless Lamp
Lamp Head Diameter:	1.25 in (3.2 cm)
Length:	5.9 in (15 cm)
Weight:	4.8 oz (0.14 kg)
Power Source:	3 "AAA" batteries
Run Time:	5 hours (continuous)

NOTE: For most applications, our UV lamp does not require fluorescence-enhancing glasses



SPECTROLINE® Mini UV LED Leak Detection Lamp

SPE-MVL-CS

- Battery operated
- Economical, compact light for finding leaks
- Perfect for tight spaces
- Durable anodized body with lanyard



Specifications

Lamp Head Diameter:

Light Source:

Lamp Style:

Power Source:

Length:

Weight:

Run Time:









Leak Detection Range

5 feet (1.5 m) or more

NOTE: For most applications, our UV lamp does not require fluorescence-enhancing glasses.

LED

Cordless Lamp

3.85 in (9.8 cm)

3.52 oz (0.1 kg)

3 "AAA" batteries

3.5 hours (continuous)

1.3 in (3.3 cm)



FREQUENTLY UESTIONS

UV MAN

Here to answer your questions!

FAQ

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 dyes and system additives.

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

How do I use fluorescent leak detection dye?

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 lamps. All leak sites will glow brightly with escaping fluorescent dye.

Which injection method should l use?

For small-to-medium sized AC&R systems: use our EZ-Ject" or GLO-STICK injection methods for applications such as residential units, ice machines, window units, and refrigerators.

For medium-to-large sized AC&R systems: use our BigEZ[®] injection method for applications such as 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?

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.

Co-solvents are chemical substances added to

System Type: ^①	Small Systems: Ice Machines, Window A/C Units & Refrigerators	Residential Systems	Light Commercial & Large Residential Systems	Commercial & Light Industrial Systems	
EZ-Ject" Multi-Dose Cartridge 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	
Lines on Cartridge	1 line	2 lines	6 lines	8 - 14 lines	

GLO-Stick* Single-Dose Capsules for Small to Medium Sized Systems

Lubricant	_	Up to 1.6 qt (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 4.9 lb (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 2 tons (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 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp

Lubricant Type:

Universal/POE	_	SPE-GS1E	SPE-GS2E	SPE-GS3E
PVE	-	SPE-GS1PVE	SPE-GS2PVE	SPE-GS3PVE
1 Always use the lubricent velume when it is known. Definerent charge and hereenewer are encryptionations				

 \odot Always use the lubricant volume when it is known. Refrigerant charge, tonnage and horsepower are approximations. GLO-STICK[®] dye capsules require the use of two RP-BV-50 bleed valves (for use on 1/4 inch flare hose fittings).

BigEZ [®] Multi-Dose Cartridge for Medium to Large Sized Systems		
SPE-BEZ5E	BigEZ [~] Method	1 line, 1/8 oz (3.7 ml) per 1/2 gal (1.9 L) of lubricant, 12.5 lb (5.7 kg) of refrigerant or 5 tons (17.6 kW) of cooling

SYSTEM ADDITIVES:

GLO Seal [®] Fluorescent Dye + Sealant for Small to Medium Sized Systems		
SPE-SDSK-CS	Syringe Method	Treats 0.5 - 2.5 tons (1.76 - 8.79 kW) of cooling
SPE-EZDS-CS	EZ-Ject" Method	Treats up to 3.5 tons (12.3 kW) of cooling
SPE-GSDS-CS	Stick Capsule Method	Treats up to 3.5 tons (12.3 kW) of cooling

Cool Seal [®] A/C Leak Sealer for Small to Medium Sized Systems		
CS-1CS	EZ-Ject [®] Method	Treats up to 4 tons (14.1 kW) of cooling
CS-3CS	Stick Capsule Method	Treats up to 4 tons (14.1 kW) of cooling

ACID-BUSTER^{*®} Acid Scavenging Solution for Small to Medium Sized Systems

AB-5CS	EZ-Ject [®] Method	Treats up to 2 tons (7 kW) of cooling
SPE-ABS-CS	Stick Capsule Method	Treats up to 2 tons (7 kW) of cooling

O On severely acidic systems, double the dosage shown

Bottled Dyes for Medium to Large Sized Systems		
SPE-AG5E-16	AR-GLO [°] 5E	0.25 oz (7.4 ml) per gallon (3.8 L) of lubricant
SPE-WGG-8CS	WATER-GLO [®] ULTRA	8 oz (237 ml) per 500 gallons (1,900 L) of water







RESIDENTIAL

Mini-Splits Window Units Packaged Units



COMMERCIAL



Office Building Retail Shops Conference Halls Industrial Facilities

REFRIGERATION

Supermarkets Ice machines Refrigerated Warehouses Food & Dairy Plants



Trusted for Over 65 Years







EMERSON. Climate Technologies

FUĴITSU

Honeywell

vell **SANYO**

Whirlpool







