Brochure 710 (January 2016)

SPECTROLINE®
HVAC/R

FLUORESCENT
LEAK DETECTION PRODUCTS FOR HVAC/R SYSTEMS

BRIGHTEST • SAFEST
OEM
APPROVED
DYES
MOST CONCENTRATED

Trusted by these Industry Leaders:

DuPont, Whirlpool, Daikin, Honeywell, Carrier, Fujitsu, Tecumseh, Copeland brand products, Sanyo, embraco, Emerson Climate Technologies, Idemitsu, Bitzer, Bristol Compressors

ISO 9001:2008 CERTIFIED COMPANY

SPECTRONICS CORPORATION

AR-GLO® FLUORESCENT AC&R DYES

***All* Spectroline® AR-GLO® fluorescent dyes can remain safely in the system.** This makes it fast and easy to pinpoint leaks, confirm repairs and perform future preventive maintenance checks. **AR-GLO®** AC&R dyes are the only dyes that give you all these benefits:

Universal (POE)
Dyes are compatible with all refrigerants and lubricants

OEM-Approved
By major compressor, refrigerant, lubricant and AC&R equipment manufacturers

Co-solvent Free
Dyes will not impair lubricant properties, which could lead to excessive wear or damage to system components

NSF Certified
Registered to meet food-grade processing requirements for category codes HTX-2 and HX-2*

*Universal/POE dyes only

Fluorescent Leak Detection: HOW IT WORKS

STEP 1
Add dye to system and let it circulate...
(The dye/oil mixture escapes with the refrigerant and collects at all leak sites)

STEP 2
Scan system with a Spectroline® leak detection lamp and see all leaks glow brilliantly!

SPECTRONICS CORPORATION
Innovating for Today + Imagining for Tomorrow

Company Background:
Spectronics Corporation invented fluorescent leak detection in 1955 and remains the world's leader in ultraviolet technology. The company manufactures and distributes over 1,000 different products for the HVAC/R, industrial, laboratory, automotive, biotechnology and many other markets.

SMALL TO MEDIUM
Sized AC&R Systems

- Ice Machines
- Window Units
- Refrigerators
- Residential
- Commercial

MEDIUM TO LARGE
Sized AC&R Systems

- Supermarkets
- Refrigerated Warehouses
- Food & Dairy Plants
- Industrial Facilities

TABLE OF CONTENTS

AR-GLO® Fluorescent AC&R Dyes 2
Cordless Leak Detection Lamps 3
EZ-Ject™ Dye Injection System 4
GLO-STICK® Dye Capsule System 5
BigEZ™ Dye Injection System 6
Full-Color Hanging Display Packaging
Cool Seal™ A/C Leak Sealer 7
ACID-BUSTER™ Acid Scavenging Solution 7
Dosage Charts 8

Nervous about voiding your equipment's warranty?
Some dyes are approved by manufacturers, and can remain safely in systems for their lifetime. It's about choosing the right dye for you. Check the dye manufacturer's specifications for an OEM approval indication.

All our cordless leak detection lamps feature a compact design for getting into tight spaces, a heavy-duty, durable lamp body and a powerful, high-intensity LED with 100,000 hour service life.

Good

25′ Range (7.6 m)

3 AAA BATTERIES

VIOLET LED

OPX-400CS
OPTIMAX™ 400
Economical, Violet Light Leak Detection Flashlight

- Provides optimal fluorescent dye response and contrast
- Power comparable to high-intensity 150-watt lamps
- 5 hours of continuous inspection time
- Works with universal/POE dyes *only*

Includes lanyard, belt holster and fluorescence-enhancing glasses.

Better

25′ Range (7.6 m)

Li-ION RECHARGEABLE

VIOLET LED

OLX-400
OPTI-LUX™ 400
Rechargeable, Violet Light Leak Detection Flashlight

- Provides optimal fluorescent dye response and contrast
- Power comparable to high-intensity 150-watt lamps
- 4 hours of continuous inspection time between charges
- Works with universal/POE dyes *only*

Includes smart charging cradle with AC and DC cord sets, lanyard and fluorescence-enhancing glasses.

Best

25′ Range (7.6 m)

Li-ION RECHARGEABLE

UV LED

OLX-365
OPTI-LUX™ 365
Rechargeable, UV Leak Detection Flashlight

- Twice as powerful as most corded, high-intensity UV lamps
- 4 hours of continuous inspection between charges
- Works with both mineral oil *and* universal/POE dyes

Includes smart charging cradle, AC and DC cord sets, spare battery, lanyard, belt holster, UV-absorbing glasses and rugged carrying case.

Telescopic

6″ Range (15 cm)

3 1.5V BATTERIES

VIOLET LED

VMP-400CS
VioMAX Plus™
Telescopic, Violet Light Leak Detection Penlight Lamp

- Provides optimal fluorescent dye response and contrast
- Large, 1 inch (2.53 cm) pivoting mirror provides ideal viewing at any angle!
- Automatic on/off function
- Extends to a full 29 inches (74 cm) to get deep into hard-to-reach areas
- Works with universal/POE dyes *only*

Powered by three 1.5 volt (AG3/LR41) batteries (included).

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

VIOLET LIGHT
- Works with universal/POE dyes *only*
- Yellow fluorescence-enhancing glasses not required for most applications

UV LIGHT
- Works with *all* AC&R dyes
- Especially effective on mineral oil dyes

Red "CS" part number suffix denotes full-color, hanging clamshell packaging

EZ-Ject™ DYE INJECTION SYSTEM

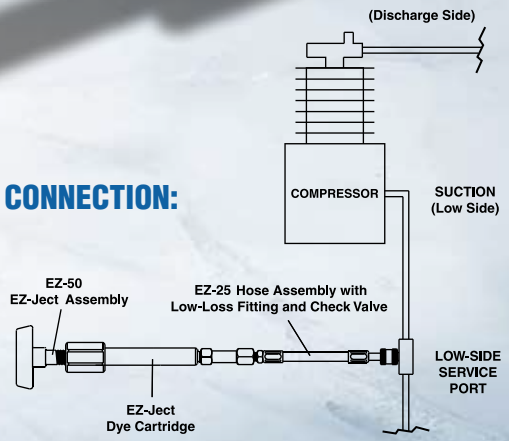
MULTI-DOSE

Versatile, multi-dose cartridges. Injector easily overcomes system pressure. Add fluorescent dye with system off or running.

TREATS UP TO:
Lubricant: 2 gallons (7.5 L)
Refrigerant: 25 lbs (11.4 kg)
Cooling: 12 tons

SMALL-MEDIUM SIZED AC&R SYSTEMS

CONNECTION:



LEAK DETECTION KITS

Economical!

Rechargeable!

OPK-40EZ/E Complete EZ-Ject™ Kit

Features the **OPX-400 OPTIMAX™ 400,** economical, cordless, violet light leak detection flashlight.

- **EZ-50** EZ-Ject™ dye injector assembly
- **EZ-25** hose/coupler with check valve, low-loss and purge fittings
- (2) **EZ-4/E** 0.5 oz (14.8 ml) universal/POE dye cartridges

OLK-400EZ/E Complete EZ-Ject™ Kit

Features the **OLX-400 OPTI-LUX™ 400,** rechargeable, cordless, violet light leak detection flashlight.

- **EZ-50** EZ-Ject™ dye injector assembly
- **EZ-25** hose/coupler with check valve, low-loss and purge fittings
- (2) **EZ-4/E** 0.5 oz (14.8 ml) universal/POE dye cartridges

UNIVERSAL DYE INJECTION KIT & CARTRIDGE

EZ-100/ECS Universal Dye Injection Kit

For all AC&R systems, including high-pressure R-410A systems. Compatible with mineral oil, POE, PVE, and alkyl benzene lubricants.

- **EZ-50** EZ-Ject™ dye injector assembly
- **EZ-25** hose/coupler with check valve, low-loss and purge fittings
- (2) **EZ-4/E** 0.5 oz (14.8 ml) universal/POE dye cartridges
- Service labels

NSF

EZ-4/ECS

EZ-Ject™ Universal/POE
0.5 oz (14.8 ml) dye cartridge

COOLSEAL™

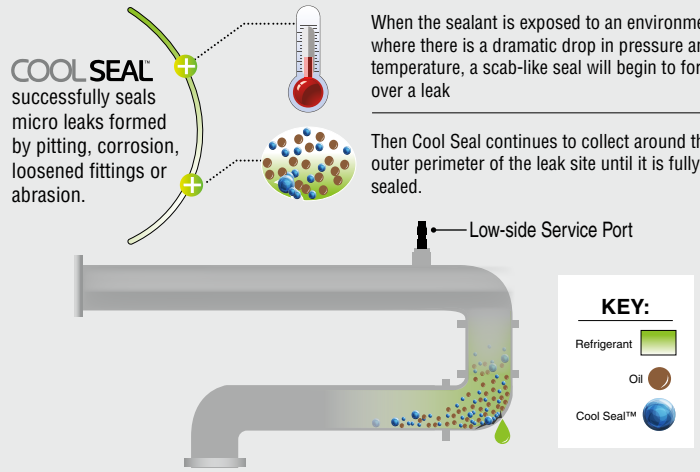
A/C LEAK SEALER

Seals pesky leaks in compressors, 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 AC&R refrigerants and oils, including high-pressure R-410A systems.

- Non-polymer, oil-soluble formula safe for system components and recovery equipment
- An alternative to expensive parts replacement on older AC&R systems
- Meets ASHRAE 97 standard for chemical stability
- Three convenient delivery methods

HOW IT WORKS

Spectroline's Cool Seal is a proprietary blend of lubricants and additives.



CS-100CS Cool Seal™ EZ-Ject™ A/C Leak Sealer Kit

Contains:
- **EZ-50** EZ-Ject™ injector assembly
- **CS-25** hose/coupler with check valve, low-loss and purge fittings
- (2) **CS-1** 0.5 (14.8 ml) EZ-Ject™ cartridges prefilled with Cool Seal™ A/C leak sealer.

CS-1CS

- 0.5 oz (14.8 ml) EZ-Ject™ cartridge. Each cartridge treats up to 2 tons of cooling.

CS-2CS

- 2 oz (50 ml) BigEZ™ cartridge works with BigEZ™ injector
- Can also be used with EZ-Ject™ injector using **CS-50** adapter and **CS-35** hose/coupler
- Full cartridge treats 6 to 12 tons of cooling

CS-3CS

- 0.5 oz (14.8 ml) GLO-STICK® capsule
- Requires (2) BV-50 bleed valves
- Capsule treats up to 2 tons of cooling

ACID-BUSTER™

ACID SCAVENGING SOLUTION

AB-100CS ACID-BUSTER™ Injection Kit

Acid Scavenging Solution — *prevents compressor burnout.*

Contains:
- **EZ-50** EZ-Ject injector assembly
- **EZ-25** hose/coupler with check valve, low-loss and purge fittings
- (2) **AB-5** 0.5 oz (14.8 ml) EZ-Ject cartridges prefilled with ACID-BUSTER acid scavenging solution

AB-5CS

ACID-BUSTER™
0.5 oz (14.8 ml) replacement cartridge

TES-31 Tamper-Evident Straps

Protect AC&R systems against refrigerant cross-contamination and unqualified repairs. Warranty your work and ensure return business.

- Fast and easy to use
- No special tools required
- Packaged in convenient zip-lock storage bag
- Comes complete with 10 tamper-proof tie straps with unique serial numbers and matching labels

FI-2

Universal A/C Dye and Oil injector

2 oz (59.1 ml) refillable AC&R fluid injector with control valve, hose/coupler and purge fitting

Red "CS" part number suffix denotes full-color, hanging clamshell packaging

DOSAGE CHARTS

Note: All universal/POE dye cartridges and capsules are NSF Certified and registered to meet food-grade processing requirements for category codes HTX-2 and HX-2

EZ-Ject™ Dye Cartridges

System Type ①	Small systems, e.g., ice machines, window A/C units and refrigerators	Residential systems②	Light commercial and large residential systems②	Commercial and light industrial, including all split systems②
Refrigeration Oil Charge	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 3.0 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	1.1 to 2 tons	2.1 to 6 tons	6.1 to 12 tons
Horsepower	Up to 1 Hp	1.1 to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp
No. Graduations on Cartridge	1	2	6	8-14

Treatment: One graduation treats one pint of refrigeration oil; two graduations treat one quart.
① Always use the refrigeration oil charge when it is known. Refrigerant charge, tonnage and horsepower are approximations.
② One full cartridge is recommended for all split systems, even if they are being used for residential applications and they hold less than 10 lbs of refrigerant.

GLO-STICK® Dye Capsules

GLO-STICK® dye capsules require the use of two BV-50 bleed valves *(for use on 1/4 inch flare hose fittings)*

System Type ①	Small systems, e.g., ice machines, window A/C units and refrigerators	Residential systems②	Light commercial and large residential systems②	Commercial and light industrial, including all split systems②
Refrigeration Oil Charge	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 3.0 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	1.1 to 2 tons	2.1 to 6 tons	6.1 to 12 tons
Horsepower	Up to 1 Hp	1.1 to 4 Hp	4.1 to 10 Hp	10.1 to 25 Hp
Lubricant Type				
Universal/POE	GS-101/ECS	GS-1/ECS	GS-2/ECS	GS-3/ECS
Mineral Oil	GS-101CS	GS-1CS	GS-2CS	GS-3CS
PVE	GS-101/PVE	GS-1/PVE	GS-2/PVE	GS-3/PVE

① Always use the refrigeration oil charge when it is known. Refrigerant charge, tonnage and horsepower are approximations.
② Use GS-3 series with all split systems, even if they are being used for residential applications and they hold less than 10 lbs of refrigerant.

BigEZ™ Dye Cartridges

BEZ-4 and BEZ-8 Series ①	System Size
1 line, 1/8 oz (3.7 ml)	1/2 gal (1.9 L) of lubricant, 12.5 lb (5.7 kg) of refrigerant or 5 tons of cooling

① For oil-less systems, use 1 oz (30 ml) BEZ-4/OL per 155 lb (71 kg) of refrigerant

Cool Seal™ A/C Leak Sealer

Product Number	Delivery Method	Dosage
CS-1CS	EZ-Ject™	One cartridge treats up to 2 tons of cooling
CS-2CS	EZ-Ject™ or BigEZ™	One cartridge treats 6 to 12 tons of cooling
CS-3CS	GLO-STICK®	One capsule treats up to 2 tons of cooling

ACID-BUSTER™ Acid Scavenging Solution

Product Number	Injector	Cartridge Size	Dosage ①
AB-5CS	EZ-Ject™	0.5 oz (14.8 ml)	4 lines, 1/8 oz (3.7 ml) per 8 oz (237 ml) of refrigerant oil. One cartridge treats up to 1 qt (946 ml) of oil.

① On severely acidic systems, double the dosage shown

SPECTRONICS CORPORATION
www.spectroline.com
956 Brush Hollow Rd, Westbury, NY 11590 USA
800-274-8888 • 516-333-4840

DISTRIBUTED BY:

Follow us on at Spectroline

03/16 A01181-14
PRINTED IN U.S.A.