

LEAK SCANNER SOLUTION FLUORESCENT ADDITIVES

Leak Scanner Solution is available in four different concentrations to suit every need. Leak Scanner 1, 2 and 3 come in cases of twelve ½-ounce bottles. Leak Scanner 4 is available in individual 2-ounce and pint bottles. See the chart below for usage information. *Please note: Because of the wide variety of AC&R systems, it is always best to check the fluorescent brightness through the liquid-line sight glass(es) or the return Schrader valve with a Leak Scanner Black Light to make sure that enough Leak Scanner Solution has been added to the system.*

Additive Type	Amount of Refrigerant Required by System	Additive Amount	Typical Application
Leak Scanner Solution 1 69451 (½ oz.)	Up to 4.9 lbs.	½ oz.	Residential Systems*
Leak Scanner Solution 2 69452 (½ oz.)	5 to 9.9 lbs.	½ oz.	Light commercial and large residential systems*
Leak Scanner Solution 3 69453 (½ oz.)	10 to 25 lbs.	½ oz.	Commercial and light industrial, including all split systems*
Leak Scanner Solution 4 69454 (2 oz.) 69455 (16 oz.)	N/A**	Use ¼ oz. of Solution 4 per gallon of refrigeration oil	Industrial

*Use Leak Scanner Solution 3 with *all* split systems, even if they are being used for residential applications and hold less than 10 lbs. of refrigerant. One bottle of Leak Scanner Solution 3 will treat a system containing 2 gallons of refrigeration oil.

**When the oil charge is known, calculate the Leak Scanner dosage based on the amount of refrigeration oil in the system.

NOTE: With chillers and any other AC&R systems where oil does not circulate with the refrigerant, please contact the AC&R Technical Department at Ritchie Engineering Company to discuss your particular application. Either a standard Leak Scanner Solution or a custom formulation will be recommended, depending on the system description.

NOTE: The above supercedes all Leak Scanner dosage information previously published. January, 1994

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FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY

Ritchie Fluorescent Leak Scanner Solutions are designed for use with the Ritchie Yellow Jacket® Mist Infuser™ — Part No. 69460 — for the safe and effective detection of refrigerant leaks in virtually *all* air conditioning and refrigeration systems. They are effective with *every* commonly used refrigerant, including R-11, R-12, R-22, R-113, R-114, R-500 and R-502. When used with a high-intensity Ritchie Leak Scanner Black Light (UV) Lamp — Part No. 69465 — even leaks less than ¼ of an ounce per year will be pinpointed by a bright fluorescent glow. When used as directed, the Scanner Leak Solutions are *completely safe* to service personnel, the environment and HVAC&R systems. After the leaks are detected, the Scanner Solutions can be left in the system permanently without any reduction in performance. All Leak Scanner Solutions meet or exceed standards set by ASHRAE and ANSI.

DIRECTIONS:

1. Choose the appropriate Scanner Solution based on the system capacity (the recommended dosage is printed on the reverse side of this sheet). Pour the Scanner Solution into the fill port of the Mist Infuser, tilting to vent all air. Since Scanner Solutions are premeasured, simply add the entire contents of the bottle. Note that different Scanner Solution formulas may be combined to match the amount of refrigerant in the system. To avoid introduction of air or moisture into the system, *never* use only a portion of any Scanner Solution bottle. Use only full, unopened bottles and discard any remaining Scanner Solution.

IMPORTANT: The recommended dosages of the Leak Scanner Solution are *only* estimates. After infusing the Scanner Solution into the system, view the refrigerant in the liquid line or crankcase sight glass under a Ritchie UV Lamp to make sure that it fluoresces brightly (if no sight glass is available, contact the Technical Sales Department at Ritchie Engineering Company, Inc. for an alternative method). If the refrigerant does not fluoresce brightly, progressively add small amounts of Scanner Solution until sufficient brightness is achieved.

NOTE: For proper operation of the Mist Infuser, follow the detailed instructions enclosed with the unit.

2. After infusing the Scanner Solution, run the system for 15-30 minutes to allow the additive to circulate.

3. To locate the leaks, trace the system with a Ritchie UV Lamp. A bright yellow-green fluorescent glow will be visible at the site of the leak(s). Large leaks will become evident quickly while minute leaks may take up to 24-48 hours to be detected. To pinpoint minute leaks in automobile systems, have the customer operate the vehicle and air conditioner as much as possible over a 24 hour period and then inspect with the UV lamp. **NOTE:** Fluorescent contrast may be heightened by shielding or dimming room light.

4. After repairing the leak(s), wipe with any general-purpose cleaner to remove the remaining Scanner Solution. Run the system for 24 hours to allow ample time to catch the smallest leaks, and re-inspect with the UV lamp. If there is no glow, every leak has been repaired.

WARNING: Not to be used in systems operating at temperatures below -45°F (-43°C). For special Leak Scanner Solution formulas which may be used in systems with lower operating temperatures, please contact the Technical Sales Department at Ritchie Engineering Company, Inc.

CAUTION: Store away from direct sunlight, extreme heat sources and open flame. For use by qualified service personnel only. May be harmful or fatal if swallowed. Avoid contact with eyes or skin. Use of goggles is recommended. Wash thoroughly after handling.

CONTAINS REFRIGERANT OIL AND ORGANIC DYE

KEEP OUT OF REACH OF CHILDREN

Ritchie Engineering Company, Inc. assumes no liability for consequential or other damage resulting from the use or misuse of this product.