

Are You Seeing Red?



YOU'RE NOT MAD. YOU JUST FOUND YOUR LEAK!

TRACE[®]

INTERNAL REFRIGERANT
LEAK DETECTOR



With
Superbrite
UV Tracer!

- Works under all conditions!
- Not affected by noise!
- Not affected by wind!
- Visible in bright light!
- Visible under ultraviolet light!

Locates leaks exactly - Never a false positive. No batteries required. No calibration needed. Safer than Halide torch. Works on all size leaks - even leaks due to metal porosity. Works in wet and humid conditions. Even shows through ice and frost.

Trace is a Red Dye, fluorescent tracer type leak detector for refrigeration, air-conditioning and hydraulic systems. It is a concentrated dye penetrant with a fluorescent additive that is completely harmless to refrigeration and air conditioning equipment. Versatile, accurate and reliable leak detection. Easy to use and inexpensive.

- ★ Trace shows as bright RED under normal lighting conditions!
- ★ Trace glows a bright purplish blue when exposed to an ultraviolet light source!

HYDRO
TRACE[®]
INTERNAL REFRIGERANT
LEAK DETECTOR

Hydro Trace is available for use in locating leaks in water based systems.

TRACE²
INTERNAL REFRIGERANT
LEAK DETECTOR

Trace2 is available for use in systems using Polyol Ester, Polyalkylene Glycol, and Polyalphaolefins Lubricants.

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Highside Chemical products are available through local wholesalers and distributors worldwide.



TRACE is a red dye, fluorescent tracer type leak detector for refrigeration, air conditioning and hydraulic systems. It is a concentrated dye penetrant with a fluorescent additive in a mineral oil base. TRACE is designed for use in systems using Mineral Oil or Alkybenzene as a lubricant.



TRACE2 is a red dye, fluorescent type leak detector for refrigeration, air conditioning and hydraulic systems. It is a concentrated dye penetrant with a fluorescent additive in a Polyol Ester lubricant base. TRACE2 is designed to be universally compatible in all refrigerants and refrigeration lubricants, including all CFC's, HFC's and HCFC's.

TRACE and TRACE2: are completely harmless to refrigeration and air conditioning equipment. Both are easily visible in most light levels and will fluoresce brightly when exposed to any UV light source in low light levels. TRACE will not sludge oil or deposit gum. When trace is added to the refrigerant of a system, leaks show as red stains in normal light conditions and as a bright purplish blue when exposed to a UV light source at the location of the leak. The red stains even show through ice and frost. TRACE products are especially effective in detecting "on and off" leaks because the red color and fluorescent tracer remain on the equipment until wiped off. TRACE is soluble in both oil and refrigerant, but is nonvolatile. Therefore, in areas where the refrigerant is a gas, the red color and fluorescent tracer travel with the oil. In systems that contain oil separators or where the oil does not travel with the refrigerant, TRACE must be added to the main refrigerant flow or the oil separator must be temporarily bypassed. Solid dryers are not affected by TRACE, but they remove some color. Therefore, if color intensity is reduced, more TRACE should be added. TRACE is also excellent for use in hydraulic systems to color hydraulic fluids for easy leak detection.

SPECIAL INFORMATION: Out of sight leaks can be found by wiping hidden areas with a white cloth. Red stains will appear on the cloth if leaks are present. TRACE is not usable in systems where the oil does not travel with the refrigerant. In systems where low sides operate continuously under a vacuum, TRACE should be circulated and the system let stand to build up low side pressure before looking for leaks. The time required for TRACE to show leaks is directly proportional to the size of the leak. Very small leaks may take longer to show but, even the smallest leak due to metal porosity will show in time. Adsorption type driers will absorb some color but they do not hold it very tightly. This does not interfere with their drying capacity because the color is displaced by moisture. The amount of color absorbed is a very small part of the total color in the system so the leak detecting ability of TRACE is not materially reduced. If after a short period of operation, the color intensity in the refrigerant is weak, more TRACE can be added and/or the drier bypassed.

FLUORESCENT: In addition to its bright red color, both TRACE and TRACE2 contain a superbrite fluorescent tracer that will glow a bright purplish blue when exposed to an ultraviolet light source. Bright lights or sunlight may diminish the fluorescence of TRACE. However, the bright redness of TRACE remains easily detectable.

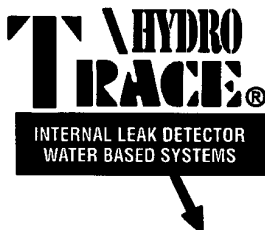
RECOMMENDATIONS FOR CHARGING TRACE® & TRACE2® TO REFRIGERATION SYSTEMS

QUANTITY TO USE: Add 1/8 fluid ounce (3.75 ml) of TRACE directly to the refrigerant of any system for every 1 pound of refrigerant in the system.

- (1). HIGHSIDE'S SYSTEM INJECTOR is the quickest and simplest method for charging TRACE into an operating refrigeration or air-conditioning system. Follow the instructions that are included with the injector. Highside System Injectors are available through local wholesalers world wide.
- (2). If the system is large, TRACE can be added by using a standard oil charging pump; (add directly to refrigerant not to crank case.)
- (3). If the system is small, place the proper amount of TRACE in a charging hose and connect one end to the low-side access valve on the compressor and the other end to a source of refrigerant. A 36" CHARGING HOSE HOLDS 22 ml or 3/4 OF A FLUID OUNCE. Purge both ends of the hose and tighten fittings. Open the valve at the refrigerant source. Now with the source of refrigerant above the access valve, crack the access valve very slowly and force TRACE into the system with refrigerant. **CAUTION: TRACE** is a liquid and will sludge the compressor if charged too quickly.
- (4). Make up a charging unit out of standard pipe fittings. (1 - 2 X 1/2 nipple and 2 - 1/4 male flare X 1/2 female pipe). Assemble flare fittings on both ends of the nipple. Place a proper amount of TRACE in this unit. Using charging hoses, connect one end of the unit to the access valve on the low-side of the compressor and the other end to a source of refrigerant. Purge the system. Then make sure the fittings at the access valve are securely tightened and move the source of refrigerant to a position above the access valve so that the line and charging unit slope down toward the access valve. Very slowly crack the access valve on the compressor and force TRACE into the system with refrigerant.

TRACE IS VISIBLE AS BRIGHT RED UNDER NORMAL LIGHT. HOWEVER, IT WILL GLOW A BRIGHT PURPLISH BLUE WHEN EXPOSED TO AN ULTRAVIOLET LIGHT.

REMEMBER ! TRACE IS A LIQUID AND SHOULD BE CHARGED INTO THE SYSTEM VERY SLOWLY. THE COMPRESSOR MAY SLUDGE IF CHARGED TOO QUICKLY.



HYDRO TRACE is designed specifically to locate hard-to-find leaks in any closed system containing water and/or antifreeze compounds such as Propylene Glycol and Ethylene Glycol. HYDRO TRACE is chemically inert and will not harm equipment or seals. Locates leaks exactly, never a false positive. When HYDRO TRACE is added to a system leaks are easily visible as bright red stains under normal lighting conditions and as a bright orange glow when exposed to an ultraviolet light source. HYDRO TRACE has many applications...

- REFRIGERATION
- HYDRONICS
- AUTOMOTIVE
- PROCESS COOLING