

ZYGLO[®] ZL-4C WATER SOLUBLE PENETRANT

GENERAL DESCRIPTION

Zygro[®] ZL-4C is a biodegradable, fluorescent, water base penetrant that is soluble in water and can be diluted infinitely, but is generally used as supplied or diluted from 1:1 to 1:2 in water. It contains no petroleum base solvents and fluoresces a greenish-yellow color under ultraviolet radiation. Use of a black light source with a peak wavelength of 365 nm, such as the Magnaflux[®] ZB-100F Fan Cooled Black Light, is recommended.

APPLICATIONS

Zygro[®] ZL-4C is generally used where petroleum solvents may attack the test surface such as on plastics. It may also be used on ceramics and as a leaker penetrant to detect leaks.

COMPOSITION

Zygro[®] ZL-4C is composed of water, fluorescent dye and liquid emulsifying agents, but does not contain a corrosion inhibitor.

TYPICAL PROPERTIES (Not a specification)

Typical Properties	ZL-4C
Flash Point	None
Density	7.5 lbs/gal (900g/l)
Viscosity @ 100°F	13.5 cs
pH (1:1 in water)	7.0
Sulfur	Approximately 1%
Chlorine	<1000 ppm
VOC	385 g/l

METHOD OF APPLICATION

Zygro[®] ZL-4C can be applied by dipping, brushing, flow on, or spraying. It can be diluted with water to lower its viscosity for easier spraying. When diluted, it will penetrate through leaks faster than when undiluted.

PENETRATION - DWELL TIME

For conventional penetrant applications allow 2 to 15 minutes penetration time. For leak testing apply penetrant to one side of test area, apply developer to the opposite side and allow 15 to 30 minutes penetration time before inspecting under UV black light.

PENETRANT REMOVAL

ZL-4C is easily removed by water rinsing. Care must be taken to avoid over removal of penetrant from discontinuities.

RECOMMENDED DEVELOPERS

Aqueous developers are not recommended for use with ZL-4C as they tend to wash the penetrant out of discontinuities. Dry powder developer (ZP-4B Dry Powder Developer) is applied after the test surface has been dried.

PACKAGING

5 Gal. Plastic Container.

COVERAGE

(1) Gal. covers approximately 800 square feet.