PRODUCT DATA SHEET

ZYGLO®

ZYGLO® ZL-4C WATER SOLUBLE PENETRANT

General Description:

ZL-4C is a biodegradable, fluorescent, water base penetrant. ZL-4C is soluble in water and can be diluted infinitely, but is generally used diluted as supplied or from 1:1 to 1:2 in water. ZL-4C contains no petroleum base solvents. ZL-4C fluoresces a greenish-yellow color under ultraviolet radiation of 365 nm, such as the **MAGNAFLUX ZB-100F fan-cooled black light**.

Applications:

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

Composition:

ZL-4C contains water, fluorescent dye, liquid emulsifying agents, but no corrosion inhibitor.

Typical Properties (Not a Specification):

Viscosity @ 100ºF:	13.5 cs
Flash point:	None
Density:	7.5 lbs./gal. (900 gms./L)
pH (1:1 in water):	7.0
Sulfur:	Approximately 1%
Chlorine:	Less than 1000 ppm

Method of Application:

Surface area to be tested must be clean and dry before penetrant application.

ZL-4C can be applied by dipping, brushing, flowing on, or spraying.

ZL-4C can be diluted with water to lower its viscosity, making spraying easier. 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 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 with ZL-4C as they tend to wash the penetrant out of the discontinuities. Dry powder developer (ZP-4B Dry Powder Developer) is applied after the test surface has been dried.

Container Size:

5 gallon plastic container

Coverage:

1 gallon approximately 800 square feet