

AUTOGLO[®] AL-4B

水基型荧光渗透剂

Water Based Fluorescent Penetrant

基本信息 GENERAL DESCRIPTION

Autoglo[®] AL-4B 是一种可生物降解的，水基荧光渗透剂。AL-4B 是水溶性的，可根据不同的应用需求，按 1:1 至 1:2 的比例用水稀释。为了达到其最高灵敏度，可无需稀释，直接使用本产品。

Autoglo[®] AL-4B is a biodegradable, fluorescent, water based penetrant. AL-4B is water soluble and can be diluted 1:1 to 1:2 in water depending on the application. To achieve maximum sensitivity the product should be used as supplied.

AL-4B 在波长 365nm 的紫外光照射下，呈现荧光黄绿色。请使用专业的黑光灯作为紫外光源，如 Magnaflux ZB-100F 黑光灯或 EV5000 LED 光源黑光灯。

AL-4B fluoresces a greenish-yellow color under ultraviolet radiation wavelength of 365 nm, and should be used with a suitable UV source such as the Magnaflux ZB-100F or Magnaflux ZB-100-LED UV black light.

应用 APPLICATION

AL-4B 可适合许多对灵敏度要求不高的应用，同时又要求优秀的水洗性。优秀的水洗性使其能轻易地从表面粗糙的非金属铸件表面或形状复杂的工件表面去除，因此非常适合汽车行业的应用。

AL-4B can be used in many applications requiring a low sensitivity penetrant, combined with excellent water washability. The superior washability and easy removal from rough nonferrous cast parts and complex shapes makes it ideal for use in the automotive industry.

AL-4B 可用于替代某些传统的以石油溶剂为基础的渗透剂，此类渗透剂会对待测工件的表面产生腐蚀作用，例如在塑料制品上的检测。它也可被用于泄密检测的渗透剂，可对焊接的槽体和容器进行泄漏检测。对于此类情况，本产品可用水稀释，以获得更经济应用。

AL-4B has been found to be useful in applications where traditional petroleum solvent based penetrants may attack the test surface, such as on plastics. It can also be used as a leaker penetrant to detect through leaks in welded tanks and containers. For these situations the product can be diluted with water for more economical application.

组成 COMPOSITION

AL-4B 包含水，荧光染料，乳化剂和溶剂，但不包含任何防锈剂。

AL-4B contains water, fluorescent dyes, liquid emulsifying agents and solvents, but does not contain any corrosion inhibitors.

典型性能(非规格) TYPICAL PROPERTIES (Not a specification)

典型性能 Typical Properties	AL-4B 水基型荧光渗透剂
颜色 Color	黄绿色 Yellow / Green
气味 Odor	气味温和 Blend
闪点 Flash Point	大于 100 °C >100 °C
密度@20 °C Density @20 °C	0.99 克/毫升 0.99 g/ml
粘度@38 °C Viscosity @38 °C	5.0 厘司 5.0 CS
pH (1%在水中) pH (1% in water)	6 - 8
EN-ISO 3452-2 Sec 6.3-6.12	符合要求 Meet Requirements

与 Magnaflux 的其它化学材料相同, Autoglo AL-4B 有着严密的质量控制, 确保不同批次产品的一致性和延续性, 以保证最佳的过程控制和检验的可靠性。

Like all Magnaflux materials Autoglo AL-4B is closely controlled to provide unique batch to batch consistency and uniformity to assure optimum process control and inspection reliability.

施加方法 METHOD OF APPLICATION

渗透液施加前, 彻底清洁并干燥待测表面。

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

AL-4B 可通过浸涂, 涂刷, 流过, 喷涂或静电喷涂等方式施加。

AL-4B can be applied by dipping, brushing, flowing on, spraying or electrostatic spray.

AL-4B 可通过加水稀释以降低其粘度, 使喷涂更容易。当稀释后, 其渗入缺陷的速度会比未稀释时更快。

AL-4B can be diluted with water to lower its viscosity, making spraying easier. When diluted, it will penetrate through leaks faster than when undiluted.

Autoglo 水洗型渗透剂的使用温度在 10 °C 到 55 °C 之间。

Autoglo water washable penetrants should be used at temperatures between 10 °C and 55 °C.

渗透/停留时间 PENETRATION - DWELL TIME

对于普通的渗透检测应用, 一般需等待 2 到 15 分钟的渗透时间。做渗漏检测时, 在待测容器的一面施加渗透剂, 在另一面施加显像剂, 并等待 15 到 30 分钟的渗透时间。

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 using a UV black light.

去除渗透剂 PENETRANT REMOVAL

AL-4B 可以轻易地喷水去处。请务必注意，有可能会产生过洗，将渗透液从缺陷中洗去。

AL-4B is easily removed by water spray; care must be taken to avoid over washing which can remove the penetrant from discontinuities.

推荐的显像剂 RECOMMENDED DEVELOPERS

干粉显像剂

Dry Powder Developer

ZP-4B 是可自由流动的轻质粉末显像剂，可通过吹粉、静电喷涂、喷粉或使用粉暴施加。待测工件在施加显像剂前必须经过干燥处理。

ZP-4B is free flowing lightweight powder developer which is applied by dusting, electrostatic spray, puffer or using a powder storm. The component under test must be dry prior to application of the developer.

溶剂基显像剂

Solvent Based Developer

SKD-S2 或 ZP-9F 是快干型溶剂基显像剂，可通过喷淋法施加。待测工件在施加显像剂前必须经过干燥处理。

Spotcheck SKD-S2 or Zyglo ZP-9F is quick drying solvent-based developers which are applied by spraying. The component under test must be dry prior to application of the developer.

水基显像剂

Aqueous / Water Based Developer

ZP-14A 和 ZP-5B 是显像剂干粉，需与水调配制成显像剂。此类显像剂需在工件干燥前施加，可通过浸渍或喷淋法施加。在施加后，工件必须经过干燥才能进行检测。

ZP-14A and Zyglo ZP-5B is supplied as powder concentrates to made up with water to produce working solutions. These developers are applied, prior to component drying, by dipping or spraying. After application the component must be dried before inspection.

请注意：水基显像剂使用时需特别小心，因为他们有可能将渗透液带出缺陷。

Please note: Aqueous developers should be used with great care, as they tend to wash the penetrant out of the discontinuities on prolonged contact.

符合规范 SPECIFICATION COMPLIANCE

EN-ISO 3452-2 Sec 6.3-6.12

包装规格 PACKAGING

25 升桶；200 升桶；1000 升桶。

25 Liter Pail, 200 Liter Drum and 1000 Liter Tote.