### **Technical Data Sheet**

# **LD7 Liquid Developer**

# LD7 NON-AQUEOUS LIQUID DEVELOPER

#### General

LD7 Liquid Developer is a non-aqueous liquid suspension developer for use as part of either a Checkmor colour contrast penetrant process or a Britemor fluorescent penetrant process. The proper application of LD7 adds significantly to the sensitivity of the processes. LD7 Liquid Developer is a suspension of inert white developer particles in a flammable volatile organic solvent.

### **Typical Properties (not a specification)**

Form : White solid particles in a clear liquid

Flash Point (Abel) : -18°C

Density at 15°C : 0.96

Corrosion Test [to AMS 2644(Mil I 25135)] : Passes requirements

### Method of Use

LD7 Liquid Developer is a suspension of solid particles which settle out on standing and therefore aerosols or bulk containers must be shaken thoroughly before and during use to ensure even suspension of particles in the carrier solvent. LD7 Liquid Developer must be applied by a light even spray as any other method of application such as immersion or brushing will cause a loss of process sensitivity.

When LD7 forms part of a Checkmor colour contrast process, it should be applied by successive sprayings until the surface under test is just covered by a solid white film. When LD7 is used as part of a Britemor fluorescent penetrant process, it should be applied by successive sprayings until a translucent layer is achieved and it is possible to see the test surface through the developer film. In either case, each spray application should be allowed to dry before subsequent layers are applied.

After application, the developer should be allowed to act for a minimum of 10 minutes before inspection under suitable illumination. Developing times may vary depending on the controlling specification.

For visual colour contrast inspection, viewing should be carried out in good white light of at least 500 lux at the component surface.

For fluorescent penetrant inspection, viewing should be carried out in a darkened area with ambient light less than 10 lux and under UVA light of peak wavelength 365 nm and minimum intensity of 1200 microwatts per square centimetre at the component surface.

Indications will appear deep red when a Checkmor process is in use and brilliant yellow-green when using a Britemor fluorescent process.



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### Certification

LD7 Liquid Developer is listed in the qualified products list or meets the requirements of many specifications including:

AMS 2644 (Mil I 25135)

**AFNOR NF09-120** 

DIN 54152

ASME Boiler and Pressure Vessel Code Section V. ASTM 165-80

NAVSEA 250-1500-1

Certification of levels of sulphur and halogens to ASME V, RCCM and AECL and other appropriate specifications requiring such information are available.

## Safety guidance

Before operating the process described it is important that this complete document, together with any relevant Safety Data sheets, be read and understood.

### **General information**

Chemetall PLC supplies a wide range of chemical products and associated equipment for cleaning, sanitising, descaling, paint and carbon removal, metal protection and non-destructive testing. Sales Executives are available to advise on specific problems and applications.

### Labour and environmental protection

All local and national regulations on the transport, storage, use and waste treatment of chemicals in concentrated or diluted form and as working solutions must be obeyed. Further specific information on the products can be found in the Safety Data Sheets supplied. The user should also pay strict attention to information and hazard symbols shown on product labels.

### **Waste disposal**

All waste waters must be treated in accordance with national legislation and local regulations prior to discharge to the sewer.

Sep 2008

