BRITEMOR® / CHECKMOR® LD7 & LD9

NON-AQUEOUS LIQUID DEVELOPERS

PRIMARY APPLICATION

LD7 and LD9 are liquid suspensions of an inert white powder in a quick drying solvent with low sulphur, halogen and alkali metal content.

LD7 and LD9 are used as developers in penetrant testing of forged parts, welds, cast and drop forged parts. LD9 offers best results with both color contrast and fluorescent penetrants while the thin, translucent layer provided by LD7 will make it especially suited for fluorescent penetrant testing applications.

LD7 and LD9 are available as bulk material and as aerosol. They are typically used in a penetrant system with CHECKMOR® or BRITEMOR® penetrants and their S series of removers.

Conformances

✓ EN ISO 3452-2	Form d & e
✓ SAE	QPL-2644 (approval, LD7)
✓ ASME Boiler & Vessel Code	Section V, Article 6

Ask your Chemetall representative for a complete list of approvals

CHEMICAL CHARACTERISTICS

Property	LD7	LD9	Unit
Appearance	White solid particle in a clear liquid		-
Density	0.96	0.8	g/ml @ 20°C / 68°F
Flash point	-18 / 0	16 / 61	°C / °F

These are typical values only and do not constitute a specification.

APPLICATION PROCEDURE

Pre-cleaning, penetrant & excess penetrant removal

Clean part with e.g. S72, S76, S80 or S85 before applying the Checkmor® or Britemor® penetrant. Apply cleaner to the part and wipe clean with cloth. Surface has to be free of grease, oil and dirt. Allow part to dry before applying penetrant.

Apply a thin even film of Checkmor® or Britemor® penetrant to cover test area and allow penetration as per the required time.

Developing

LD7 or LD9 are liquid suspensions of solid particles which settle-out on standing; and therefore, aerosols and bulk containers must be shaken thoroughly before and during use.

Remove excess surface penetrant with clean cloths, pre-moistened with cleaner (e.g. S72, S76, S80 or S85). Alternatively, removal can be affected by gentle water spray or by rinsing with water (for application over 5°C / 41°F). Do not flush surface with cleaner as sensitivity will be impaired. Repeat procedure until surface penetrant has been removed. Thoroughly dry the component surface before developer application.

Spray thin, even developer film over area to be inspected (spraying distance 30 cm / 1 ft.). Surface temperature should be between -10 and 50°C (15-120°F). LD7 must be applied by a light even spray (immersion or brushing will cause a loss of process sensitivity). When LD7 is used as part of a Britemor® fluorescent penetrant process, it should be applied by successive spraying until a translucent layer is achieved.

Allow 10 – 30 minutes developing time before evaluation.

Inspection

For Checkmor® color contrast processes, inspection should be carried out in diffused white light of at least 500 lux (approx. 46 ft.cdl) and in the case of Britemor® fluorescent penetrant processes under UVA of 365 nm peak wavelength, typical output of 1200 µwatts/cm² at 38 cm from the component.

Note: the procedure above is a recommendation only; where relevant, the process specifications of the approving authorities must be followed.

SOLUTIONS CONTROL

LD7 and LD9 are used in the prescribed manner, no significant corrosion is likely to occur on commonly used constructional metals. LD7 and LD9 may cause swelling of some rubbers and plastics, the product should be tested for compatibility before application.

NOTES ON USE (See Safety Data Sheet)

SAFETY AND HANDLING

Prior to handling and use of any of the materials referenced in this document, the Safety Data Sheets should be read and understood by all personnel in contact with these materials.

KEEP OUT OF REACH OF CHILDREN

STORAGE

Store in a cool place, with protection from freezing conditions. All containers should be tightly closed when not in use.

SHELF LIFE

Shelf life is 36 months for aerosol cans and 60 months for bulk material.

DISPOSAL

Any disposal of the materials referenced in this document should be in accordance with all applicable federal, state, providential and local regulations. The process solution can contain components other than those present in the materials as supplied. Analysis of process solutions may be required prior to disposal.

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