

Approvals and conformities

ASME

MANUFACTURER: NDT-Europa (NL)

DESCRIPTION / APPLICATION(S):

EFXR-02 is a red dye penetrant, level 2 according EN IO 3452-2, based on surfactants, easy to wash with water. EFXR-02 contains no petroleum solvents.

The effluent processing cost is lower. The environment is protected. EFXR-02 has a tridye formulation for an optimal contrast.

Companion products: developer D-100, D-106, R60

DIRECTIONS FOR USE

1. Penetrant testing

Preparation of the surface :

Surface must be free of contaminants, even inside flaws. Use adequate methods to remove oxides, paints, oil, water, etc. Allow 2 minutes minimum for complete evaporation and wait until return at ambient temperature.

Application :

Apply a thin coat of EFX-R02 to clean, dry surfaces by spraying, flowing, brushing or dipping.

Dwell-Time:

A 10 minutes, or longer, dwell time is mandatory. Allow the penetrant to drain from the part. This not only conserves material, it improves performance.

Removal:

Use a quick, ambient temperature water wash to rinse EFXR-02 from the part surface. Avoid washing entrapped penetrant from surface flaws; avoid high water pressures and temperatures; avoid prolonged washing and scrubbing.

Drying:

Begin drying procedure immediately after the water wash; do not allow water to stand or puddle on the part's surface. Use pressurized air to disperse and remove as much excess surface water as possible before placing part in oven. Place part in a recirculating oven set no higher than 70°C just long enough

to evaporate surface moisture. Use a heat gun to dry parts too large to fit in oven; avoid overheating.

Developing:

In order to see indications, apply a developer such as the Sherwin developers listed above with the appropriate mean.

Inspection:

Some 10 minutes after the developer has dried, you may inspect the part: the defects appear on the white background in the form of red spots (blowholes, porosities, etc.) or red lines (cracks, defective welds, shocks, etc.). Parts shall be inspected as per ISO 3059 standard requirements. Inspection is better off when using a "cool white" light, colour temperature being more than 4500K and colour rendition index more than 80 or light with an illuminating index of D65. It is recommended NOT TO USE undervoltaged incandescent bulbs, as it often happens with battery-operated units, this giving a yellowish light.

2. Leak detection

Like any other penetrant, EFXR-02 can be used to detect through-defects: apply the penetrant on one side, the developer on the other and find through-defects by looking at the opposite side on which you have applied the penetrant with white light (same as for penetrant testing).

TECHNICAL CHARACTERISTICS

BIODEGRADABILITY:

According to the biodegradability test in aerobic and according to OECD 302B criteria, EFXR-02 has shown capacities at inherent biodegradability.

The result is positive (biodegradability >70%) but this does not mean that the effluents of EFXR-02 can be released into natural environments, however an effluent discharge into water treatment plant is entirely possible: contact the entity managing the wastewater networks in your area.

Appearance purple liquid
Flash point 61-93°C

PRECAUTIONS FOR USE AND STORAGE

Transport / Handling: Refer to Material Safety Data Sheet (MSDS).

Storage : Keep away from moisture and daylight

Temperature range: 5°C - 50°C

Keep packaging closed after taking out some of the product

This technical data sheet replaces and cancels the previous one.

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