

# **WB-200** WATER BASED FLUORESCENT PENETRANT AQUA-CHEK

Technical Data Sheet

### Approvals and conformities

ASME ISO 3452-2 QPD-AMS 2644 SAFRAN

### MANUFACTURER: SHERWIN (US) / NDT-Europa (NL)

### **DESCRIPTION / APPLICATION(S):**

Fluorescent water-based penetrant Type I, Method A, Level 2.

Aqua-Chek WB-200 is a free-rinsing, water-washable, bio-degradable, water-base fluorescent penetrant.

It is supplied either as WB-200 (ready-to-use form) or as WB-200C (as a "concentrate").

WB-200 has exceptional self-developing properties.

WB-200 contains no oil or petroleum distillates. Waste treatment and disposal costs are reduced. Resources are conserved.

WB-200 is the WB-200C diluted with 50 % of water.

Companion products: D-90G Dry Powder Developer (form a)

- D-100 Non aqueous Developer (form d)
- D-106 Non aqueous Developer (form d)
- D-110A.1 Water-suspendable (form c)

### **DIRECTIONS FOR USE**

These instructions describe the basic process. They may need to be amended by the user to comply with applicable specifications and/or inspection criteria provided by the contracting agency.



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**Mixing od WB-200C:** Mix Aqua-Chek WB-200C concentrate with equal parts by volume of water. Recommanded dilution is between 45 and 54% of WB-200C. Deionised water is preferred but not required. Adding the concentrate slowly to the water while stirring is the more efficient mixing method.

**Application:** apply a thin coat of WB-200 to clean, dry surfaces by spraying, flowing, brushing or dipping.

**Dwell-Time:** a 10 minute, 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 WB-200 from the part surface. Avoid washing entrapped penetrant from surface flaws; avoid high water pressures and temperatures; avoid prolonged washing and scrubbing. Wash under UV-A light.

**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:** WB-200 is self-developing. To amplify flaw marks, or in critical inspection situations, use a developer such as the Sherwin developers listed above.

**Inspection:** in a UV-A booth, with ambient visible light level less than 20 lux, and with UV-A irradiance of at least 1000 W/cm<sup>2</sup> (better : 1500 W/cm<sup>2</sup>) on the surface under inspection, it is also possible to use actinic blue light.

**Tank Maintenance:** water evaporation should be anticipated. Evaporation rate will depend on atmospheric conditions, "tank head room", etc. The recommended water content in the bath is 51-60%.

Check of the water content of the bath according to ASTM E1417 § 7.8.2.3: this check should preferably be carried out with a digital refractometer with a minimum measuring range of 30-50°Brix. The refractometer must be checked with a standard solution(s) to ensure the consistency of its measurement. Below is the correlation between the reading (on a WB-200 bath sample) and the water content in the WB-200 water content in the WB-200:



## **TECHNICAL CHARACTERISTICS**



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Compatible with any metal and many synthetic materials (composite). Very low halogen and sulfur content

### **BIODEGRADABILITY:**

According to the biodegradability test in aerobic and according to OECD 302B criteria, WB-200 has shown capacities at inherent biodegradability.

The sample of WB-200 is 'inherent biodegradable without pre-adaptation' and further evidence of an "ultimate inherent biodegradability" according to OECD criteria extrapolated to a finish product. The result is positive (biodegradability >70%) but this does not mean that the effluents of WB-200 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 ...... yellow-green liquid

### PRECAUTIONS FOR USE AND STORAGE

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

Storage : Keep away from moisture and daylight

Temperature range: 0°C à 50° C

Keep packaging closed after taking out some of the product

#### This technical data sheet replaces and cancels the previous one.

The above details have been compiled to the best of our knowledge. They have, however, an indicative value only and we therefore make no warranties and assume no liability in connection with any use of this information, particularly if a third party's rights are affected by the use of our products. The above information has been compiled based upon tests carried out by BABBCO/SHERWIN BABBCO. All data is subject to change as Socomore deems appropriate. The data given is not intended to substitute for any testing you must conduct in order to determine the suitability of the product for your particular purposes. Please check your local legislation applicable to the use of this product. Should you need any further information please contact us.



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