WB-200 WATER-WASHABLE

Technical Data Sheet

Description: WB-200 is a level 2, Method A water-washable fluorescent water base penetrant for inspecting castings, extrusions and similar parts. **WB-200** is a versatile, general purpose penetrant for use on a variety of materials, including aluminum and magnesium. Complies with low sulfur and low halogen requirements. It is supplied either in ready-to-use form or as a "concentrate."

Special Features:

1. **WB-200** is shipped either in ready-to-use form, or as a concentrate and mixed by the user with water. When supplied as a concentrate, shipping and material costs are lower; storage requirements are lessened. As a concentrate, the product is designated as **WB-200C.**

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

3. As a concentrate, **WB-200C** has a flash point over 148°C (300°F). When mixed with 50% water, **WB-200** is practically non-combustible.

Chemical Properties

Color:	Green
Viscosity:	16.3 cSt @ 100^0F
Fluorescence:	Yellow/Green
Water Tolerance:	Infinite
Flash Point:	None

Companion Products

D-90G Dry Powder Developer	D-110A Water Suspendable Developer
D-100 Non-Aqueous Developer	DR-60 Solvent Remover
D-106 Non-Aqueous Developer	DR-62 Solvent Remover

Packaging

One Gallon Cans	55 Gallon Drums
Five Gallon Cans	

Storage /Shelf Life

Keep away from moisture and sunlight.
Temperature limit: 40^0F to 125^0F (0-50^0C)
Keep the container closed when not in use.
Shelf life from invoice date: Bulk Container – 60 months

Specifications

SAE AMS 2644 & QPL – Type 1, Method A, Level 2

Lockheed Martin	Northrop Grumman
Boeing	Rolls Royce
Honeywell	Turbomeca
Airbus	General Electric

Special Features

1. Low to near zero background for assured indication visibility.
2. Sharp, precise flaw indication for rapid interpretation.
3. Excellent electrostatic spray capability.
4. Long material tank life due to formula stability and non-volatility.
5. Low material consumption (low drag out) due to low viscosity.
6. Clean, odorless product, vapor free atmosphere.
7. Water base penetrant with no flash point.

Instructions

Note: These instructions describe the basic process, but they may need to be amended by the user to comply with applicable specification and/or inspection criteria provided by the contracting agency.

1. **Mixing:** Mix **WB-200C** concentrate with equal parts by volume of water. Deionized water is preferred but not required. Adding the concentrate slowly to the water while stirring is the more efficient mixing method

2. **Application:** Apply **WB-200** only to clean, dry surfaces by spraying, flowing, brushing or dipping.

3. **Dwell Time:** A 10 minute dwell time is suggested, although in many cases five minutes will suffice. When particularly tight cracks are suspected, or the part is especially critical, the dwell time may be extended to 30 minutes, or longer. Allow the penetrant to drain from the part surface back into the penetrant tank to conserve material.

4. **Removal**:
   a) Use ambient temperature water to rinse **WB-200** from the part surface. To avoid washing entrapped penetrant from surface flaws, do not use high water pressure or temperatures and avoid prolonged washing times.
   b) Solvent Wipe Method - Remove as much excess penetrant as possible using clean dry rag or toweling. Remove remaining penetrant film by wiping with a rag or toweling that has been slightly moistened with solvent. Use a minimum of solvent; avoid flushing penetrant from flaws. Do not spray solvent directly on the part surface

when removing excess penetrant. Rough surfaces require more generous application of solvent.

5. **Drying**: A re-circulating oven set no higher than 160^0F (71^0C) is suggested. Leave the part in the oven just long enough to evaporate surface moisture. Drying is improved by using pressurized air to disperse and remove as much excess water as possible before placing the part in to the oven.
6. **Developing**: Apply the developer by cloud, dusting, spray or dip using the appropriate developer. Flaw marks are visible under black light almost immediately, but allow sufficient developing time to enhance the flaw visibility.

7. **Inspection:** Inspect parts under appropriate UV-A light intensity and minimal visible light.

8. **Tank Maintenance**: Water evaporation should be anticipated. Evaporation rate will depend on atmospheric conditions and "tank head room." When tank is filled, record refractometer reading, then take periodic readings. As required, add water to restore to original reading.

Health & Safety

Use with adequate ventilation and away from sparks, fire or open flames. Avoid prolonged or repeated contact with skin. Do not take internally. Consult the MSDS for more safety and health information.