



# **TECHNICAL DATA SHEET**

# **DUBL-CHEK BO-1** BLACK OXIDE No.1 MAGNETIC PARTICLE OIL DISPERSION

**Description: DUBL-CHEK BO-1** is **Black Oxide No.1** black magnetic oxide suspended in a highly refined light petroleum oil. The suspension responds to magnetic leakage fields created by discontinuities in ferromagnetic material. Particles rapidly collect at leakage fields producing black indications.

### **Properties**

Particle Colour: Particle Concentration: Particle Size: SAE Sensitivity: Suspension Fluid: Viscosity: Flash Point: Black 1.2 - 2.4 ml (i.a.w AMS 3041 & AMS 3043)  $0.5 - 4.0 \mu$ m, with an average size of  $1.5\mu$ m. 6 lines Clear highly refined light petroleum oil or water  $2.64 \text{ cSt} \pm 5\%$  (ASTM D445 @  $37.8^{\circ}\text{C}\pm1^{\circ}\text{C}$ ) >95°C (>200°F)

#### **Special Features**

A unique 360° spray valve. Low background colour for high contrast indication visibility. Multiple spray patterns for controlled application and comfort. Particles are easily agitated, fast acting and produce defined indications. Can be used with both stationary and portable magnetic test equipment. Aerosols offer convenience and improve reliability.

# Companion DUBL-CHEK Products

**CP-2** Contrast Paint

# **Packaging**

Aerosol (12 aerosols per carton) 3.8L 18.9L 208L Product Code: 1503/400 Product Code: 1503/42 Product Code: 1503/51 Product Code: 1503/64

# Storage /Shelf Life

Keep away from moisture and sunlight. Keep the container closed when not in use. Temperature limit: 0°C to 50°C (40°F to 125°F) Refer to NDT Shelf Life and Storage Recommendations

#### **Specifications**

Aerosols, particles and suspension meet or exceed industry specifications including; ASTM E1444, ASME B&PV Sec V, ASTM E709, ISO 9934-2, MIL-STD-271, NAVSEA T9074-AS-GIB-010/271, MILSTD-1949, AMS 3041, AMS 3043, AMS 2641.



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### **Batch Numbers**

Batch numbers can be found on the bottom of aerosol cans or labels of bulk containers. Certificate of Conformance are provided with the product or can be downloaded from <a href="https://www.callington.com">www.callington.com</a>

#### **Instructions**

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

- 1. Clean the test surface and allow it to dry.
- 2. Apply DUBL-CHEK CP-2 for background contrast.
- 3. Magnetise the area to be inspected.
- 4. Ensure continuous agitation of the suspension. If using an aerosol, shake vigorously before and during inspection.
- 5. Apply the **BO-1** suspension to the test part at approximately 150mm from the surface.
- 6. Allow the excess oil/water to run off the inspection area.
- 7. Inspect the surface under visible light.
- 8. Collections of **Black Oxide No.1** particles will reveal discontinuities at the leakage fields.
- 9. Clean and repeat the process; changing the orientation of the magnetising direction.

#### Health & Safety

**DUBL-CHEK CP-2** is flammable and when packaged within an aerosol is extremely flammable. Use with adequate ventilation and away from spark, fire or open flames. Avoid prolonged or repeated contact with skin. Do not breathe gas, fumes, vapour or spray. Consult the MSDS for more Safety and Health information.

Get medical attention if irritation develops and persists. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

WARRANTY – All statements, information and data presented herein are believed to be accuracy and reliable but are not to be taken as a<br/>guarantee, expressed or implied, for which seller assumes legal responsibility and they are offered solely for your consideration, investigation<br/>and verification. Statements or suggestions concerning possible use of this product are made without representation or warranty that any<br/>such use if free of patent infringement and are not recommendations to infringe on any patent.22 August 2007

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