



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: Black

Particle Concentration: 1.2 - 2.4 ml (i.a.w AMS 3041 & AMS 3043) Particle Size: 0.5 - 4.0 µm, with an average size of 1.5µm. Suspension Fluid: Clear highly refined light petroleum oil or water

Flash Point: $>95^{\circ}C (>200^{\circ}F)$

Companion DUBL-CHEK Products

CP-2 Contrast Paint

Packaging

Aerosol (12 aerosols per carton)
3.8L
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-125°F)

Shelf life: 36 months (3 years) from date of manufacture.

Refer to NDT Shelf Life and Storage Recommendations for further information.

Specifications

Aerosols, particles and suspension meet or exceed industry specifications including; ASTM E1444, MIL-STD-271, NAVSEA T9074-AS-GIB-010/271, MILSTD- 1949, AMS 3041, AMS 3042, AMS 3043, AMS 2641

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 www.callington.com

Special Features

A 360° valve that enables an aerosol to be sprayed upside down.

Every aerosol contains two nozzles for comfort and multiple spray patterns.

Low background colour for assured indication visibility.

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.

More coverage for every application.





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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, if required.
- 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 suspension to the test part at a distance of approximately 150mm from 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 BO-1 packaged within an aerosol is extremely flammable. When **Black Oxide No.1** is suspended in oil it forms a combustible liquid. 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.

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