

January 31, 2018

**CERTIFICATION**

We hereby certify that samples of the material identified below by batch number, have been analyzed in accordance with test methods that meet and/or exceed the detection limits for fluoride, chloride, and sulfur per ASME Boiler and Pressure Vessel Code, Section V, Article 6, paragraph T-641, 1998-2017 Editions and Addenda, with the following results:

|                  |                    | <b>FLUORIDE</b><br><b>ASTM E165</b><br><b><u>ANNEX 4</u></b> | <b>CHLORIDE</b><br><b>ASTM E165</b><br><b><u>ANNEX 4</u></b> | <b>SULFUR</b><br><b>ASTM E165</b><br><b><u>ANNEX 4</u></b> |
|------------------|--------------------|--------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------|
| <b>DUBL-CHEK</b> | <b>Black Oxide</b> | <b>&lt;0.0001% BW</b>                                        | <b>&lt;0.0001% BW</b>                                        | <b>&lt;0.0001% BW</b>                                      |
| <b>BATCH NO.</b> | <b>832-A42</b>     |                                                              |                                                              |                                                            |

We further certify that this material meets or exceeds the requirements of A.E.C.L., MIL-STD-1949, ASTM E1444, MIL-I-6868E, ASTM E709, AMS 3041 for MPF suspension, AMS 3042 for dry powder, and for aerosols AMS 3043.

Copies of the certification and laboratory reports are on file in our office for your inspection.

**SHERWIN INCORPORATED**

Emad Assar  
R&D Chemist

Revision: August 2000

## CERTIFICATE OF CONFORMANCE

Date: January 31, 2017

Product: Black Oxide

Batch No.: 832-A42

It is hereby certified that this material has been manufactured in accordance with, and conforms to ASTM E1444, MIL-STD-1949, and AMS 3041 for MPF suspension, AMS 3042 for dry powder, and AMS 3043 for aerosols. Results of the required quality conformance tests are listed below.

| <u>Test Description</u>                   | <u>Results</u> |
|-------------------------------------------|----------------|
| Contamination, i.a.w AMS 3041, 3042, 3043 | None           |
| Concentration, i.a.w AMS 3041, 3042, 3043 | 1.8 mls        |
| Sensitivity, i.a.w AMS 3041 and AMS 3043  | Conforms       |
| Particles:                                |                |
| Particle color                            | Black          |
| Particle size, i.a.w AMS 3042, #325 sieve | >98% passing   |

It is further certified that this material meets the requirements of ASME B&PV Code Section V and ASTM E709.

SHERWIN INCORPORATED



Emad Assar  
R&D Chemist

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