

July 2, 2019

**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 through 2017 Editions and Addenda, with the following results:

		<b>FLUORIDE</b> <b>ASTM E165</b> <b><u>ANNEX 4</u></b>	<b>CHLORIDE</b> <b>ASTM E165</b> <b><u>ANNEX 4</u></b>	<b>SULFUR</b> <b>ASTM E165</b> <b><u>ANNEX 4</u></b>
<b>DUBL-CHEK</b>	<b>MPF</b>	<b>&lt;0.0001 % BW</b>	<b>&lt;0.0001 % BW</b>	<b>&lt;0.0001 % BW</b>
<b>BATCH NO.</b>	<b>915-F60</b>			

We further certify that this material meets or exceeds the requirements of ASTM E1444, MIL-I-6868E, A-A-59230, ASTM E709, and AMS 2641.

**SHERWIN INCORPORATED**

  
**Q.C. Laboratory**

Revision: August 2005

**CERTIFICATE OF CONFORMANCE**

September 04, 2017

Product: MPF – Magnetic Particle Fluid


Batch No.: 915-F60

It is hereby certified that this material has been manufactured in accordance with, and conforms to ASTM E1444, MIL-STD-1949, A-A-59230 and AMS 2641 Type I. Results of the required quality conformance tests are listed below.

<u>Test Description</u>	<u>Results</u>
Flash point i.a.w. ASTM D93	220°F
Viscosity i.a.w. ASTM D445 at 100 ± 1°F	2.61 cSts
Background fluorescence	Conforms
Fluoride content i.a.w. ASTM E165, Annex 4	0.0001% BW
Chloride residue i.a.w. ASTM E165, Annex 4	0.0001% BW
Sulfur residue i.a.w. ASTM E165, Annex 4	0.0001% BW

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

**Sherwin Incorporated**

  
Q.C. Laboratory

Revision: August 2005