

February 12, 2020

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 - 2019 Editions and addenda, with the following results:

		FLUORIDE	CHLORIDE	SULFUR
		ASTM E165	ASTM E165	ASTM E165
		<u>ANNEX A4</u>	<u>ANNEX A4</u>	<u>ANNEX A4</u>
DUBL-CHEK	HM-440	<0.0001% BW	<0.0001% BW	<0.0001% BW
BATCH NO.	010-B44			

We further certify that this material meets or exceeds the requirements of AMS 2644G, MIL-I-25135, Revision E and ASTM E1417.

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

SHERWIN INCORPORATED


Q.C. Laboratory

CERTIFICATE OF CONFORMANCE

Date: February 12, 2020

Product: HM-440

Batch No.: 010-B44

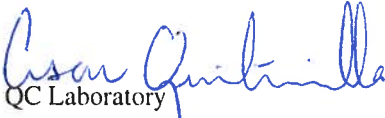
Type: I Methods: A and C

It is hereby certified that this material has been manufactured in accordance with, and conforms to, AMS 2644. Results of the required quality conformance tests, as stipulated by paragraph 4.3.2, are listed below.

<u>Test Method Paragraph</u>	<u>Test Description</u>	<u>Results</u>
3.3.3	Flash point i.a.w. ASTM D93	229°F
3.3.4	Viscosity i.a.w. ASTM D445 at 100 ± 1°F	10.97 cSts
3.3.8.3.2	Fluorescent brightness i.a.w. ASTM E1135 (Type I only)	102.2%
3.3.8.5	Water tolerance	30.6%
3.3.8.6	Removability	Conforms
3.3.8.7	Water Content	0.19%
---	Fluoride content i.a.w. ASTM E165, Annex 4	<0.0001% BW
---	Chloride content i.a.w. ASTM E165, Annex 4	<0.0001% BW
---	Sulfur content i.a.w. ASTM E165, Annex 4	<0.0001% BW

It is further certified that this material is listed or approved for listing on QPL-AMS-2644. It also meets the requirements of MIL-I-25135E, ASTM E1417, and MIL-STD-6866.

SHERWIN INCORPORATED


QC Laboratory