SHERWIN
INCORPORATED
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March 14, 2016

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 - 2011 Editions and addenda, with the following results:

		FLUORIDE ASTM E165 ANNEX A4	CHLORIDE ASTM E165 ANNEX A4	SULFUR ASTM E165 ANNEX A4
DUBL-CHEK	**HM-2D**	**<0.0001%BW**	**< 0.0038%BW**	**<0.0008%BW**
BATCH NO.	**65-C99**			

We further certify that this material meets or exceeds the requirements of A.E.C.L. Nuclear requirements, AMS 2644, 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

George Murphy
QC Chemist

DUBL-CHEK PENETRANT PROCESS

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CERTIFICATE OF CONFORMANCE

Date: March 14, 2016

Product: HM-2D

Batch No.: 65-C99

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.

Test Method Paragraph	Test Description	Results
3.3.3	Flash point i.a.w. ASTM D93	>230°F
3.3.4	Viscosity i.a.w. ASTM D445 at 100 ± 1°F	6.68 cStS
3.3.8.3.2	Fluorescent brightness i.a.w. ASTM E1135 (Type I only)	91.2%
3.3.8.5	Water tolerance (Method A only)	22.5%
3.3.8.6	Removability	Conforms
---	Fluoride content i.a.w. ASTM E165, Annex 4	<0.0001% BW
---	Chloride content i.a.w. ASTM E165, Annex 4	<0.0038% BW
---	Sulfur content i.a.w. ASTM E165, Annex 4 A.E.C.L. Nuclear Specification Limit: 1.0% maximum	<0.0008% BW
---	Total Halogen Content of the complete sample, A.E.C.L. Nuclear Specification Limit: 250 ug/g	<32 ug/g.

It is further certified that this material is listed or approved for listing on QPL-AMS-2644. It also meets the requirements of ASME Boiler and Pressure Vessel Code, Section V, Article 6, paragraph T-641, A.E.C.L., MIL-I-25135E, ASTM E1417, and MIL-STD-6866.

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George Murphy
QC Chemist

DUBL-CHEK PENETRANT PROCESS

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