

BATCH TEST CERTIFICATE

Date : 22/03/2014
Product : SKD-S2
Batch No : 14C07
Mfd. in : Mar 2014

We hereby certify that when tested at time of manufacture, the above material:

1. Meets the requirements of and has been tested for sulphur and halogens according to:
 - A. ASME Boiler and Pressure Vessel Code, 2004, 2007 & 2010 Edition, Section V, Nondestructive Examination, including 2005, 2006, 2008, & 2009b Addenda, Article 6 Paragraph T-640 and Article 24 as applicable.
 - B. ASME Boiler and Pressure Vessel Code, 1995, 1998 & 2001 Edition, Section V Nondestructive Examination, including 1999, 2000, 2002, & 2003 Addenda, Article 6 Paragraph T-640, and Article 24 as applicable.
 - C. ASME Boiler and Pressure Vessel Code, 1986, 1989, and 1992 Edition, Section V, Nondestructive Examination, Article 6 including 1992 Addenda, Paragraph T-625, 1993 Addenda Paragraph T-640 and Article 24 as applicable.
 - D. ASTM E-165-92, ASTM E-165-94, ASTM E-165-95, ASTM E-165-02, & ASTM E-165-09 Paragraph 7.1.

The following test results were obtained:

1. Sulphur : Less than 0.001. % of residue. (Limits: 0.1% Max)
2. CL+F : Less than 0.001. % of residue (Limits: 0.1% Max)
3. Cleaner residue (see note 3) : NA g/100g

E. Meets the requirements of **NUCLEAR POWER CORPORATION OF INDIA** for materials for Dye penetrant Inspection process

F. Has been tested for **SULPHUR** and **CHLORIDES** according to the procedure laid down by **NUCLEAR POWER CORPORATION OF INDIA** and the following results were obtained.

1. Sulphur : 43 (Limits: 500 ppm Max).
2. CL+F : Less than 5 (Limits: 25 ppm Max.)
3. Cleaner residue : NA (For Cleaners only)

2. We further certify that this material does not contain mercury as a basic element and no mercury bearing equipment was used in its manufacture.

Form No: F/QC/012/04 Rev:05/2012

3. It is hereby certified that the above listed inspection material and batch number meets the requirements of AMS 2644E

When tested according to paragraph 4.3.2, Sampling Plan A, the following test results were obtained:

• 4.2.2.1 Penetrant Tests:

| | |
|---|---------------------|
| Flash Point (PMCC), 3.3.3 | <u>NA</u> ° F |
| Viscosity, 3.3.4 (cs. Nominal) | <u>NA</u> cs@100° F |
| Fluorescent Brightness, 3.3.8.3.2 (FP-4PE Standard) | <u>NA</u> % |
| Water Tolerance (Method A only), 3.3.8.5 | <u>NA</u> |
| Removability, 3.3.8.6 | <u>NA</u> |

• 4.2.2.1 Emulsifier Tests:

| | |
|--|---------------------|
| Flash Point (PMCC), 3.3.3 | <u>NA</u> ° F |
| Viscosity, 3.3.4 (cs. Nominal) | <u>NA</u> cs@100° F |
| Water Content (Method D Only), 3.3.9.6 | <u>NA</u> % |

• 4.2.2.3 Developer Tests:

| | |
|----------------------------------|-------------|
| Developer Fluorescence, 3.3.10.2 | <u>PASS</u> |
| Developer Removability, 3.3.10.4 | <u>PASS</u> |
| Redispersibility, 3.3.10.5 | <u>PASS</u> |

• 3.3.11.4 Remover Tests:

| | |
|-----------------------------|-----------|
| Penetrant Removal, 4.4.11.2 | <u>NA</u> |
|-----------------------------|-----------|

It is further certified that this material meets the requirements of ASTM E 1417, Paragraph 5.1.



Manager - Quality Control

Notes:

1. Our batch number appears on the bottom of all aerosol cans and bulk containers.
2. Most specifications require test results stated in percent but some require parts per million (ppm). To convert "percent" figures to "parts per million" move the decimal four places to the right.
3. The above certification gives the results obtained at the time of manufacture. Age and use may alter the properties of any material

Form No: F/QC/012/04 Rev:05/2012