

Inspection Certificate (In accordance with EN 10204 Type-3.1)

Product: ZChek -FP12

Post Emulsifiable Fluorescent Liquid Penetrant

Batch No.: 250480

Mfg. Date: 04/25

We certify that the above product, when tested at the time of manufacturing meets the following requirements.

- *ASME Boiler and Pressure Vessel Code 2004, 2007,2010, 2013, 2017, 2019, 2021,2023 Edition section V, Nondestructive Examination including 2005, 2006, 2008, 2009b and 2011a Addenda Article-6 paragraph T-641 and Article 24 as applicable.*
- *ASME Boiler and Pressure Vessel Code, 1995, 1998 and 2001 Edition, Section V Nondestructive Examination, including 1999, 2000, 2002 and 2003 Addenda, Article 6 Paragraph T-640 and Article 24 as applicable.*
- *ASME Boiler and Pressure Vessel Code, 1986, 1989and 1992 Edition, Section V, Nondestructive Examination, Article 6 including 1992 Addenda, Paragraph T-625, 1993 Addenda Paragraph T-640 d Article 24 as applicable.*
- *ASTME-165/E-165M-18,Paragraph- 6.0,6.2,7.1,7.2.1,7.2.3,7.3.1,7.3.2,7.4,7.5,8.5,8.5.2,8.6.2,8.6.3,8.6.4,8.7,8.8,8.8.2,8.8.4.*

Parameter	ASME Boiler & PV Code	Quality requirement	Batch Result
Sulfur	Sec.V	< 0.1 %	0.0081 wt % of residue
Chlorine + Fluorine	Sec. V	< 0.1 %	0.0043 wt % of residue

- *ASTME-1417-21,Paragraph,5.1,5.1.3.4,7.2,7.2.1,7.3.2, 7.3.2.1,7.3.3,7.3.4,7.4,7.5,7.5.1,7.5.2.*
- *IS 3658-2013.*
- *EN ISO 3452-2-2021.*

Parameter	EN ISO 3452-2	Quality Requirement	Batch result
Appearance	6.1	Equal to standard	Pass
Sensitivity Test	6.2	Equal to standard	Pass
Density	6.3	0.85-0.88 g/c @ 29.5 deg.C	0.88 g/cc @ 29.5 deg.C
Viscosity	6.4	9.5-12.5 cSt @ 40 deg.C	9.5 cSt @ 40 deg.C
Flash point	6.5	93 deg.c for bulk	102 deg.C
Corrosive properties	6.11	No evidence of staining, pitting or any other corrosion on Magnesium Alloy	Pass
Sulphur Content	6.12	< 200 ppm	81 ppm
Halogen Content	6.12	< 200 ppm	43 ppm



- **Internal quality Check.**

Parameter	Internal Check	Quality Requirement	Batch Result
Color under white light	QC/TP/020	Equal to standard	Pass
Color under black light	QC/TP/020	Equal to standard	Pass
Viscosity	QC/TP/013	9.5-12.5 cSt @ 40 deg.C	9.5 cSt @ 40 deg.C
Density	QC/TP/002	0.85-0.88 g/cc @ 29.5 deg.C	0.88 g /cc @ 29.5 deg.C
Flash point	ASTM D 92	93 deg.C for bulk	102 deg.C
Surface wetting test	QC/TP/012	Equal to standard	Pass
Paper Fluorescence	QC/TP/031	Equal to standard	Pass

Notes

1. Bulk material has a minimum shelf life of 5 years and Aerosol has minimum shelf life of 3 years.
2. Most specifications require test results stated in percent, but some require parts per million (ppm). To convert percent to ppm, move the decimal four places to the right.
3. ASME Sec V, procedure states that to evaporate off volatile solvents before analysis for Sulfur and Halogens. According to these specifications, only those residues higher than 0.005 g/100ml shall be analyzed for Sulfur and Halogens. Lower residues shall be reported.

Signature
Quality Chemist

