

Inspection Certificate (accordance to EN 10204 3.1)

Product: ZChek 9E Black
Non-Fluorescent MPI Fluid

Batch No.: 191110

Mfg. Date: 11/19

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

- *ASME Boiler and Pressure Vessel Code, 2010,2013,2017,2019 Edition section V, Nondestructive Examination including 2005,2006, 2008, 2009b and 2011a Addenda , paragraph T-731 and Article 25 as applicable.*
- *ASTM E 1444/E 1444M-16, Paragraphs 5.5.2 and 5.5.3*
- *ASTM E 709-15, Paragraphs 8.1.2,8.2,8.3,8.5 &8.5.3*
- *EN ISO 9934-2-2015*

Parameter	EN ISO 9934-2	Quality requirement	Batch Result
Performance	7.1	Indication on Reference block-1 Reference block-2	Pass Length-6cm
Colour	7.2	Black liquid	Colour identical
Particle size	7.3	d> 1.5µm -d< 40 µm	dl(10%)=20.1µm=>1.5µm da= 30.7µm du(90%)=44.6 µm
Flash point	7.7	Report as found	102 deg.C
Viscosity	7.9	Less than 5.0mPa @ 20deg.c	4.0 mPa @ 20 deg.c
Mechanical stability test Short term test	7.10	No degradation in sensitivity	Pass
Foaming	7.11	No significant foaming	Pass
Storage stability	7.13		3 years
Content of Sulphur	7.15	< 200 ppm	32 ppm
Content of halogens (chlorine & fluorine)	7.15	< 200 ppm	40 ppm



Speciality Chemicals & Solutions

• **Internal quality checks**

Parameter	Internal checks	Quality requirement	Batch Result
Contamination	Visual	No foreign material, scum or agglomeration	Pass
Sensitivity	QC/ISO/022	6 indications	Pass
Concentration	QC/ISO/023	1.2-2.4 ml	1.5ml

Notes

1. Bulk material has a minimum shelf life of 5 years and Aerosol has minimum shelf life of 3 year.
2. EN ISO 9934-2 (7.15) specification require test results stated in ppm, but some require in percentage. To convert ppm to percentage, divide the ppm value by 10,000.

Signature
Manager Operations
Chaitra.M.N