

For Wet Method Fluorescent Magnetic Particle Inspection

ZChék-F9W is a green-colored water based Magnetic Particle Powder designed to be fluorescing bright green under UV Light. ZChék-F9W consists of high sensitivity particles for detection of very fine discontinuities in Ferromagnetic materials. Using the state-of-the-art encapsulation technology, ZChék-F9W is manufactured to exhibit excellent properties (High permeability, low retentivity, high mobility and optimum particle distribution) required for high sensitive fluorescent MPI process. Special additives in F9W provide excellent particle mobility in water medium and avoid flash rusting of parts.

FEATURES / BENEFITS

- Fluorescent Bright Indication under UV Light.
- Provides Excellent Discontinuities Definition.
- Sharp Indication with Minimal Background.

APPLICATIONS

ZChék-F9W is designed to detect medium to fine surface and slightly subsurface discontinuities like inclusions, seams, shrink cracks, tears, laps, flakes, welding defects, grinding cracks, quenching cracks, and fatigue cracks in raw forgings, castings (during preliminary stage), auto components (machining cracks, grinding cracks, heat treatment cracks), fabrication, steel making (billets and bars), surface transportation, oil and gas and all applications which involve further processing like machining and oiling.

CONFORMANCE / APPROVALS

- ASME B & PV Code, Sec V
- EN ISO 9934-2
- AMS 3044
- ASTM E709
- ASTM E1444/ E1444M

TYPICAL PROPERTIES

	Color Under White Light	Green
	Color Under Black Light	Green Fluorescence
	Mean Particle Size	10 microns
	Particle Size Range	1-16 microns
	Sensitivity	7 (Ketos Ring)
	Max. Operating Temperature	48.9 °C / 120 °F max
	Settling Volume	0.05 – 0.15 ml

DIRECTIONS FOR USE

- Use F9W at 10.75 gm per liter / 1.43 oz per 1 gallon. Run the pump for 15 minutes before testing.
- Check the concentration before use at least once each shift using centrifuge tube.
- Parts should be clean and dry prior to testing.
- The bath must be under continuous agitation
- Using the wet continuous method, the bath is applied to all surfaces of the part. The instant the bath stream is removed from the part the magnetizing current is applied
- Follow ASTM E1444 for the further processing.

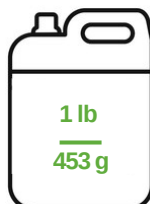
Usage Temperature: +42 to +120 °F / +6 to +48 °C

Storage Temperature: +50 to +120 °F / +10 to +48 ° C

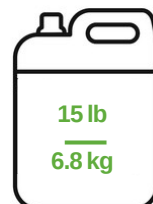
HEALTH & SAFETY

Information on Health & Safety is made available through material safety data sheets and the same can be reviewed through the company's website.

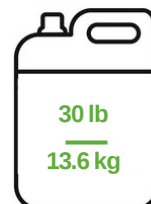
PACK SIZES



Case of 4
Part #224010



Part #224017



Part #224018

STORAGE & SHELF LIFE

Bulk packing has a Shelf Life of 5 Years, if unopened and stored as per ZChem recommendations.

Disclaimer: We have taken best care to ensure that the information provided in this data sheet is accurate. Our product is guaranteed to conform to the specifications provided. We make no other warranty; hence the liability